TAIWAN MUSIC TEACHERS' ATTITUDES TOWARD THE ARTS AND HUMANITIES CURRICULUM

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The purpose of the study was to investigate teacher attitudes toward following the Taiwanese arts and humanities curriculum and the relationship of teacher attitudes to four selected curriculum integration factors. These include (1) quantity of content areas taught in music class, (2) teachers' satisfaction of their students' learning outcomes, (3) teachers' confidence in planning lessons, and (4) number of years spent in curriculum integration. Questionnaires were distributed to 85 stratified random selected junior high schools throughout Taiwan. The school responses rate was 74%. Content validity was checked. The internal consistency reliability ranged from 0.74 to 0.92. Recorder playing, group singing, and music appreciation were found to be the most frequently taught musical skills, the most satisfied students' learning outcomes, the most confident lesson planning areas, and the most important to be included in the music instruction. Writing-by-ear and playing-by-ear were found to be the least frequently taught musical skills, the least satisfied students' learning outcome, the least confident lesson planning area, and the least importance. The two most frequently encountered barriers were insufficient administrative leadership and shallow student learning. The results of the Pearson product-moment correlation coefficient showed a low positive significant relationship between teachers' overall attitudes and the quantity of musical content areas taught (n = 83, r = 0.29, p = 0.007*, r^2 = 0.09). Based on prior research, if attitudes that are formed from personal histories are difficult to change, and in order to change attitudes, multiple strategies must be used. The majority of teachers did not strongly support or reject this new curriculum, and strong support would be needed for the curriculum to be successfully implemented. One of

the most important things that the Taiwan MOE could do is to provide music teachers with on-going in-service teacher development programs and monitoring mentor systems, in addition to the exploration and development of additional strategies that might possibly impact teachers' neutral beliefs about this new curriculum.

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TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS iii

LIST OF TABLES vi

LIST OF FIGURES vii

Chapters

1. INTRODUCTION 1

Introduction 1
Background 2
Rationale 10
The Purpose of the Study and Research Questions 13
Significance of Study 14
Limitations of the Study 15
Definitions of Terms 15

2. LITERATURE REVIEW 17

Introduction 17
Attitudes 17
Curriculum Integration 35
Arts Integration 50
National Music Curriculum of Taiwan 60

3. METHODOLOGY 88

Introduction 88
Population and Sample 88
Instrument Development 99
Validity and Reliability of the Questionnaire 109
Data Collection Procedures 113
Data Analysis 116

4. RESULTS 119

Introduction 119
The Reliability of the Questionnaire 119
Research Questions 121

5. CONCLUSION AND SUGGESTIONS 141

Introduction 141
Need and Purpose of the Study and Research Questions 141
Methodology of the Study 143
Findings 145
Conclusion and Discussion 151
Suggestions for Future Studies 159

APPENDIX A: COMPETENCY INDICATORS 161

APPENDIX B: QUESTIONNAIRE USED IN THE MAIN STUDY 166

APPENDIX C: THE RELATIONSHIP BETWEEN FIFTEEN ATTITUDINAL STATEMENTS AND ROSENBERG AND HOVLAND'S (1960) THREE ATTITUDINAL COMPONENTS FOR FIRST PRELIMINARY QUESTIONNAIRE 175

APPENDIX D: STATISTICS OF FIRST PRELIMINARY QUESTIONNAIRE 176

APPENDIX E: FIRST PRELIMINARY QUESTIONNAIRE 177

APPENDIX F: SECOND PRELIMINARY QUESTIONNAIRE 197

APPENDIX G: JUDGE FORMS 210

APPENDIX H: FREQUENCY RESULTS FOR MAIN STUDY 219

APPENDIX I: RESEARCH CONSENT FORM 235

REFERENCES 240

LIST OF TABLES

Page

1. Instructional goals and Competency Indicators of the Arts and Humanities Curriculum 67

2. Content areas of National Music Curriculum, a portion of National Junior High School Curriculum 70

3. Demographic characteristics of music teachers 98

4. Curriculum integration experience of music teachers 99

5. The Cronbach's alpha values of reliability of the questionnaires 121

6. The frequency, percentage, mean, and standard deviation of scores describing teachers' attitudes toward following the Arts and Humanities Curriculum 123

7. The frequency, percentage, mean, and standard deviation of scores describing the quantity of musical content areas taught in class 125

8. The frequency, percentage, mean, and standard deviation of scores describing teachers' satisfaction of their students' learning outcomes 129

9. Mean and standard deviation of scores describing teacher's confidence in planning lessons 133

10. The weighted score for content areas music teacher considered to be the most important 135

11. The weighted score for content areas music teacher considered to be the least important 136

12. The frequency of implementation obstacles encountered by music teacher 138

13. Pearson's product-moment correlation coefficient for teachers' overall attitudes toward following the Arts and Humanities Curriculum with the four selected integration factors 140

LIST OF FIGURES

Page

1. Levels of curriculum integration 37

2. Subject combinations of seven learning areas for National Nine-Year Integrated Curriculum 63

3. Sample: numbers of school (N = 85) organized by (1) whether the new curriculum had/had not been pilot tested, (2) region, and (3) school size 90

4. Returned questionnaires: numbers of schools (N = 63) organized by (1) whether the new curriculum had/had not been pilot tested, (2) region, and (3) school size 94

5. Returned questionnaires: number of respondents (N = 92) organized by (1) whether the new curriculum had/had not been pilot tested, (2) region, and (3) school size 96

CHAPTER 1

INTRODUCTION

During the last twenty years, Taiwan has steadily moved toward a democratic state from an authoritarian state, resulting in shifts in policy, education and social structure. Education has historically been of the highest consideration in Taiwan, and in the interest of improving educational outcomes given competition in the global community, Taiwan has implemented several education reforms in the recent past. As part of the Education Reform Action Plan of 1998, Taiwan implemented the National Nine-Year Integrated Curriculum, which first appeared in classrooms in 2001. Rather than have separate instruction in the various arts, these were integrated under the Arts and Humanities curriculum, one of seven learning areas. As this curriculum was much different from the previous one, where music was taught independently of the other arts, questions arose as to the success of the implementation of this curriculum.

Often teacher attitudes impact the success or failure of new initiatives. The attitudes and beliefs that music teachers in Taiwan held concerning this new curriculum would possibly effect its successful implementation. This study examined the beliefs and attitudes music teachers in Taiwan had concerning the Arts and Humanities curriculum and the relationship of teachers' attitudes to four selected curriculum integration factors: (1) the quantity of musical content areas taught in class, (2) teachers' satisfaction concerning students' learning of musical concepts, (3)

teachers' confidence in implementing the new curriculum, and (4) teachers' years of experience in implementing an integrated curriculum. A description of the history of political change in Taiwan would give a context of political influences on education policies and curricular decisions in Taiwan and provide background for this study.

Background

Political Influences

In March of 2000, Taiwan elected its first president from the Democratic Process Party, an opposition party focused on independence from mainland China. This was an indicator of how dramatically Taiwan's political climate had changed over the last twenty years.

Taiwan has a long history of colonization, having been under the domination of Spain from 1626 to 1642, and the Dutch United East India Company from 1624 to 1662, before becoming part of China in 1662 (Wai, Wang, & Fu, 2007b). In 1895, Taiwan became part of Japan as a result of the Sino-Japanese war and remained under Japanese occupation until the end of World War II when it was returned to the Republic of China (Wai, Wang, & Fu, 2007a; Su, 1986).

When mainland China was taken over by communism, the National Government of the Republic of China (ROC) moved to Taiwan in 1949. During the period between 1949 and 1987,

“education was used as an important part of the state apparatus that operated the process of Sinophilia in order to maintain social stability in Taiwan” (Tsai, 2002, p. 233).

The fundamental difference between Taiwan and the West at that time was the emphasis on service to Taiwanese society, even at the expense of individual rights (Tsai, 2002). There was a focus on a nationalistic education in order to achieve security and a national identity. In addition to national pride, spiritual and moral values were emphasized, long a part of Chinese tradition.

During this time, an emphasis was placed on gaining security and developing a national identity, with education focused on this development. The Ministry of Education (MOE) designed and developed text books, curricula, and instructional guides with a focus on national identity. Most of the persons in positions of authority came from mainland China with the new government, and thus the “nationalism” was inherently a mainland Chinese nationalism, not a Taiwanese one (Tsai, 2002, p. 233). The official language was Mandarin, nationalistic textbooks were created, and curricula were developed to promote Chinese social and cultural norms. All education was designed and driven by the MOE, with little input from local teachers or administrators.

During the 1980’s, Taiwan experienced both economic growth and political stability. In order to compete in the technological global market, political, social and educational reforms

became prominent. Taiwan shifted its educational focus from maintaining social stability and national identity to raising national education standards and strengthening international competitiveness (Yang, 2001). In 1994, the Council on Education Reform was established. This council was charged with studying potential strategies for restructuring the education system (Yang, 2001, p. 4). After two years of study, the council published a report giving recommendations which included: (1) to modernize educational processes and ends, (2) to meet individual needs as well as societal needs, (3) to establish a society of life-long learners, and (4) to promote extensive innovation of the educational system (Yang, 2001, p. 8-9).

One of the most important pieces of legislation that emerged as a result of the council's recommendations was the Education Basic Law of 1999. This law stipulated that it was the right of all people of Taiwan to have an education, reduced the centralized power of the MOE, delegated more authority to local administrations, and ensured equal opportunities to underprivileged students. The Education Basic Law paved the way for other innovative initiatives, including the Nine-year Integrated Curriculum which appeared in 2001. This curriculum was comprised of seven learning areas and six important themes. The seven learning areas were Language, Health and Physical Education, Social Studies, Arts and Humanities, Mathematics, Sciences and Technology, and Integrated Activities. The six important themes were

information education, environment education, gender education, human rights education, life-long learning education, and home education.

Since content integration was the hallmark of this curriculum, the Arts and Humanities curriculum combined visual arts, music, drama, and dance performance. The primary curricular objectives of the Arts and Humanities curriculum were inquiry and creation, sense of beauty and thought categorization, and culture and understanding (Iwai, 2003). Briefly exploring the benefits and challenges of integrating curricula would give insight into the decisions made by the MOE in Taiwan and provide further background for this study.

Benefits and Challenges of Integrated Curriculum

Learning theorists and educators have for several years been promoting the benefits of integrating curricula. In the United State, arts advocates and educators like Eisner and Dewey supported integrated learning. Often, academic scores improved when students were engaged in an integrated curriculum. Researchers reported that using an integrated curriculum improved students' scores in science (Jablon, 1989), reading and math (Boyd, 1994; Hartzler, 2000: Smith, 1984), and overall GPA (Padilla, 1997). Integrating music into classroom instruction also showed improved scores in language proficiency (Hart-Davis, 1994; Kelley, 1981; Laxroix, 2002; Mashack-MaCant, 1988), math (Smith, 1984), and social studies (Waller, 1997). Vars and Beane (2000) stated:

> Almost without exception, students in any type of interdisciplinary or integrative curriculum do as well as, and often better than, students in a conventional departmentalized program. These results hold whether the combined curriculum is taught by one teacher in a self-contained or block-time class or by an interdisciplinary team (p. 5).

Other researchers have found additional beneficial results. Hartzler (2000) authored a detailed study of research on integrated curriculum. Her meta-study explored thirty research projects that consistently showed that students in an integrated curriculum performed better than those in more traditional programs. Boyd, 1994, found that students improved in self-esteem, critical thinking abilities, and abilities to make group decisions. Quinn, 1995, noted more teacher-student interaction. Being engaged in an integrated curriculum allowed teachers to identify students' problems sooner and more efficiently (Quinn, 1995). Studies also found that teachers enjoy working collaboratively with their colleagues and reported greater motivation and felt less isolation during interdisciplinary team planning (Gaskins, 1994; Tipton, 1997). Teachers were found to be more satisfied with administrative support and their departmental counterparts (Greenberg, 1995).

The primary benefit stated by the MOE in Taiwan was that curricula design was now in the hands of local administrators, teachers, parents, and other interested individuals. The

government of Taiwan empowered the local governments and schools to design the curricula and choose teaching materials based on the needs of the local students. The goals of the policy were listed as (1) to tie in with values of a democratic society, (2) to allow for more diversification in content and styles of teaching, (3) to allow citizens who are not employed by the government to contribute to curricular design, and (4) to give teachers greater decision-making power in the writing of texts (Education in Taiwan, 2006).

In spite of favorable support for integrating curriculum, there were challenges that have been documented. A principle challenge was that often standardized and competency based tests were designed around traditional subject areas such as reading and math. These stand-alone subject area tests have been prevalent throughout the world, including in Taiwan's education system. Standardized testing is of importance when considering integrated curriculum because of the intense focus in Taiwan on testing in order to determine students' advancements to the next stage of their academic careers. Students were assigned to schools according to their scores on the nationwide advancement exams. A major focus in the schools was coaching students in the test-related materials and test-taking skills.

Smith (1997) noted that Taiwan's competitive educational environment highlighted the fact that only the most gifted and capable students were able to accept the challenges of their educational environment and proved fit enough to survive and prosper. To prove themselves fit in

this educational environment, students had to score well on the nationwide advancement exams. Students in Taiwan take nationwide Basic Achievement Tests [BATS] [基本學力測驗]. The BATs tested basic knowledge in Chinese, English, math, science, and social studies. Music testing was not included in these basic achievement tests, implying that music did not have the same status in schools as the BATs-tested subjects. Therefore, when teaching in an integrated curriculum, often subjects that are tested receive more priority than subjects that are not tested.

Another challenge was that often when subject areas such as music and visual art are combined together, not enough focus can be spent on either individually to provide a foundation in that one particular art form. Many such as Samuel Hope (1997) believed that each art form has its own language, vocabulary, history, body of work, and artistic procedures. This being the case, then each art form should be taught in and of itself, and not grouped together with other arts. Although these art forms might share some common principles, they each should be taught for their specific skills and knowledge.

Some opponents of integrated curricula focused on the challenges for teachers who had been required to change from a traditional method of teaching to an integrated format. In Taiwan, from 1998 to 2004, the National Nine-Year Integrated Curriculum was used simultaneously with two older national curricula, the National Junior High School Curriculum and the National Elementary School Curriculum. In August of 2004, the Taiwan MOE phased out the use of the

two old curricula. With the switch to the National Nine-Year Integrated Curriculum, total classroom instructional time in music was reduced. The National Junior High School Curriculum required junior high students to take two 50-minute music classes every week for grade 7 and one 50-minute music class for grades 8 and 9. The National Nine-Year Integrated Curriculum required students to take one 45-minute music class every week for all seventh to ninth graders. With less music instruction time, music teachers were possibly not able to cover as much content as they had previously covered, contributing to the concern that students might be learning less. In addition, performing arts was a new subject, and no teacher was certified in this profession. Consequently, school principals had to adapt to this shortage by sending music teachers and/or visual arts teachers for professional development to prepare them for teaching performing arts classes. Because of the additional time spent in attending numerous workshops and preparing new teaching materials, it was speculated that teachers' work loads were heavier than before the curriculum changed. These are some of the challenges that teachers and school programs often face when changing to an integrated curriculum.

In summary, benefits from implementing an integrated curriculum include the potential for improving students' academic grades based on the opportunities to make curricular connections, improved language proficiency, improvements in self esteem, critical thinking, the ability to make decisions, as well as benefits for teachers. Challenges to using an integrated

curriculum include the lack of standardized testing in the arts, less focus on individual arts, a reduction in class time devoted to individual arts, an increased work load, and specific art forms being taught by instructors who might not be specialists in that field.

Rationale

Teacher attitudes have been widely discussed with regard to their relationship to the success of curriculum integration. Gagne (1985) stated that "If a person holds a positive attitude toward a certain thing, he/she will be more likely to accept it; otherwise, he/she may reject or avoid it" (Gagne, 1985, pp. 63-66). Tipton (1997) stated that negative attitudes found in teachers were the hardest barriers to overcome for successful curriculum integration. Tipton found that the middle school teachers being studied were concerned their subject area could be slighted in a thematic unit. Those in favor of interdisciplinary instruction were also concerned about working with teachers who might fear the loss of autonomy and flexibility in team planning. Goode (1998) stated that due to teachers' negative attitudes toward implementing an integrated curriculum, only low-level integration occurred in some situations. In other situations, no curriculum integration occurred at all, although the secondary teachers being studied agreed that integrated curriculum played a vital role in the development of well-rounded students. Gaskins (1994) found that the integrated curriculum being studied was abandoned due to teachers' lack of commitment to its success, because of their lack of interest in teaching an interdisciplinary

program. Gaskins (1994), Goode (1998), and Tipton (1997) investigated the various situations of interdisciplinary instruction and agreed that teacher attitudes might play a crucial role in the success of curriculum integration.

Factors relating to teacher attitudes toward curriculum integration have been widely explored in studies. (Cheng, 2001; Goode, 1998; Hartzler, 2000; Hove-Pabst, 1994; Hsieh, Hou, & Tsai, 2002; Murphy, 1993; & Schumacher,1992). Teacher attitudes might assist in the implementation of curriculum integration when teachers considered an integrated curriculum as helpful toward bringing subjects together (Schumacher, 1992). Otherwise, teacher attitudes might inhibit the development of an integrated curriculum when teachers: (1) were content-protective (Goode, 1998), (2) regarded curriculum integration as not being able to cover the content and skills required by a district-prescribed traditional curriculum (Schumacher, 1992), or (3) were not confident in planning lessons (Cheng, 2001; Hsieh, Hou, & Tsai, 2002). When teachers observed students' growth in problem solving, creativity, and self-esteem from receiving an integrated curriculum (Hove-Pabst, 1994), or when they taught an integrated curriculum for an extended period (Murphy, 1993), their attitudes toward curriculum integration were found to be redirected from neutral to positive.

The previous findings of initial teacher attitudes toward implementing the Taiwan National Nine-Year Integrated Curriculum were mixed. Hsieh (2001) found that 62% to 85% of

the teachers studied had negative attitudes toward administrative leadership in the schools that had pilot implemented the new curriculum. Huang (2000) also found that only 18% of the teachers studied agreed to follow the new curriculum unconditionally. On the other hand, Wang (2000) found a low positive attitude toward implementing the integrated curriculum, and further speculated that positive teacher attitudes would increase after teachers started using the Taiwan National Nine-Year Integrated Curriculum. Wang's (2000) speculation was based on the findings reported by Murphy (1993) that as a consequence of participating in an interdisciplinary curriculum, teacher attitudes, which were found to be neutral at the beginning of the study, became positive toward the instructional impact of an integrated curriculum.

Taiwan's MOE asked all schools to follow the new curriculum starting in 2001. To ensure the success of the new curriculum, the Taiwan MOE provided numerous staff development workshops to prepare music teachers to teach the Arts and Humanities curriculum. In addition to two years of pilot implementation, the new curriculum had been used for four years. Therefore, it was necessary to examine teacher attitudes concerning the Arts and Humanities curriculum. This study was designed to examine music teachers' attitudes in the context of following the Arts and Humanities curriculum after they had actual experiences with the new curriculum in addition to receiving training in curriculum integration. The attitudes music teachers held toward following

the Arts and Humanities curriculum might reflect their commitment to the success of this new curriculum.

The Purpose of the Study and Research Questions

It was the purpose of this study to investigate teacher attitudes toward following the Arts and Humanities curriculum and the relationship of teacher attitudes to four selected curriculum integration factors. These factors included: (1) the amount of content areas taught in class, (2) teacher satisfaction of their students' learning, (3) teacher confidence in planning lessons, and (4) the number of years spent in curriculum integration. The following research questions were addressed:

1. What were music teacher attitudes concerning following the Arts and Humanities curriculum?
   - A. Teachers' attitudes toward following the fine arts component of the National Taiwan Nine-Year Integrated Curriculum;
   - B. The quantity of musical content areas taught in music class;
   - C. Teachers' satisfaction of their students' music learning outcomes;
   - D. Teachers' confidence in planning lessons for the Arts and Humanities Curriculum;
   - E. Three music curricular content areas that were considered to be the most important and the least important to be included in classroom instruction; and

F. Implementation obstacles music teachers had experienced.

2. To what extent were teachers' attitudes toward following the Arts and Humanities Curriculum related to the following four curriculum integration factors?

A. The quantity of musical content areas taught in music class;

B. Teachers' satisfaction of their students' music learning outcomes;

C. Teachers' confidence in planning lessons for the Arts and Humanities Curriculum; and

D. The number of years the music teachers had implemented an integrated curriculum.

Significance of the Study

Because of the past research pointing out the benefits of an integrated curriculum, it was the hope of the MOE in Taiwan that this new program be implemented successfully. The findings of this study might provide a useful reference concerning teacher attitudes toward day-to-day implementation of the new integrated curriculum, their perceived successes, and also perceived challenges. Because teacher attitudes have played a large role in successful implementation of new curricula in past research, the investigation of attitudes in Taiwan might provide the MOE with useful suggestions to provide effective support for the implementation of this new integrated curriculum.

Limitations of the Study

Curriculum Integration became the focus of educational practice in Taiwan with the implementation of the National nine-Year Curriculum in 1999. This researcher received a music education in Taiwan from the content-oriented former National Music Curriculum. The musical education received was considered positive, and has left this researcher with a bias toward the former music curriculum. However, every attempt was made to review the literature from an objective perspective and to compare the two curricula by clearly contrasting their scope, content, and implementation. Also, the development of the instrument included consultation with a panel of judges and several music teachers. Possible bias in the sampling was addressed by including participants from different sized schools and different geographic regions of Taiwan.

This study was limited to curriculum integration within the school programs in Taiwan. Generalizations might be difficult to make to integration programs in other settings.

Definitions of Terms

Attitude

Attitude is a positive or negative feeling toward a psychological object. This definition is readily operationalized within a continuum ranging from “very positive” to “very negative,” where a point on the continuum corresponds to the person’s attitude toward a referent psychological object.

Integrated Curriculum

Integrated curriculum may be represented by a variety of curriculum designs that combined two or more of the traditional subjects. Similar terminology includes integrative curriculum, curriculum integration, interdisciplinary curriculum, transdisciplinary, multidisciplinary, fusion and correlated curriculum.

CHAPTER 2

LITERATURE REVIEW

Introduction

This study investigated teacher attitudes concerning the Arts and Humanities curriculum and the relationship of teacher attitudes to four selected curriculum integration factors. This chapter presents a literature review and is divided into four sections: attitudes, curriculum integration, arts integration, and a description of the National Music Curriculum of Taiwan. The attitudes section describes the three-component attitude model by Rosenberg and Hoveland (1960), the motivation basis of attitude theory, studies of teacher attitudes toward curriculum integration, and studies of teacher attitudes toward following the National Nine-Year Integrated Curriculum in Taiwan. The curriculum integration section describes the background, levels, and benefits of curriculum integration, as well as implementation barriers. The arts integration section focuses on the background, levels and benefits of curriculum integration, as well as implementation challenges. The last section describes and compares the previous National Music Curriculum with the Arts and Humanities Curriculum.

Attitudes

Attitudes are defined in dictionaries as opinions, feelings, or behaviors representing a personal feeling or passion toward an object. These dictionary definitions include: attitude is a

tendency of the mind (*Random House Webster's Unabridged Dictionary*, 1997, p. 134) and a state of mind, feeling, or disposition (*The American Heritage Dictionary of the English Language*, 2006, p. 116). The most extensive definitions are given by *Webster's Third New International Dictionary* (1986). Attitude is defined as follows:

> Attitude is (1) a position or bearing as indicating action, feeling, or mood; (2) the feeling or mind itself; (3) a behavior representative of feeling or conviction; (4) a disposition that is primarily grounded in affect and emotion and is expressive of opinions rather than belief; (5) an organism's state of readiness to act that is often accompanied by considerable affect and that may be activated by an appropriate stimulus into significant or meaningful behavior; (6) a persistent disposition to act either positively or negatively toward a person, group, object, situation, or value. (p. 141)

In addition to the above definitions, attitudes have been defined in education research. Mueller, 1986, defined attitude as the sum of a person's inclinations and feelings, prejudices and bias, preconceived notions, ideas, fears, and convictions regarding any specific issue (Mueller, 1986). Others have described attitudes as screens or "filters" (Joram & Gabriele, 1998) which influence all new information concerning teaching and learning.

These definitions are related to Rosenberg and Hovland's (1960) three-component model of attitudes because these definitions cover the three aspects, namely cognitive, affective, and

behavioral outcomes of attitudes. Although this model was not a more recent model, researchers have continued to use it to conceptualize attitude formation in terms of teaching and learning. Wood (2000) stated that attitudes are considered as having three related components: cognitive, affective, and behavioral. The cognitive component focuses on the idea or thinking upon which the attitude is based, the affective concerns feelings about the issue, and the behavioral concerns the action that comes about because of the attitude. A closer look at the original model would provide a theoretical framework for this study.

Rosenberg and Hovland Three-component Model of Attitudes

Even though this model was dated, it was appropriate to use in this study because it provided a significant theoretical framework in studying people's attitudes and showed a complex network of possible interactions among and between the attitude construct and the response components (Cutietta, 1992). Rosenberg and Hovland (1960) stated:

> Attitudes are typically defined as predispositions to respond in a particular way toward a specified class of objects ... they are not directly observable or measurable … they are inferred from the way we react to particular stimuli … the types of responses that are commonly used as indices of attitudes fall into three major categories: cognitive, affective, and behavioral. (p. 1)

Rosenberg and Hovland (1960) stipulated that cognitive responses contain thoughts that people have about the attitude object, affective responses consist of feelings and emotions people have in relation to that object, and behavioral responses include people's actions with respect to that object. Rosenberg and Hovland (1960) explained,

> An individual's cognitive response is more typically inferred from verbal statement of beliefs, concepts, and perceptions … affective response may be inferred from measures of physiological variables as blood pressure or galvanic response, but is more typically inferred from verbal statements of how much he likes or dislikes … behavioral response may be evaluated by how one does respond when directly confronted with the situation but may also be inferred from what one says one will do in the given situation. (pp. 3-4)

Rosenberg and Hovland (1960) acknowledged the inconsistency between these three responsive modes. They said, "Subjects who were similar in their beliefs on a particular issue were not similar in how they felt about the issue emotionally or in the actions they would take concerning it" (p. 2). Eagly and Chaiken (1993) pointed out that whether the three modes of evaluative responses were consistent with one another needed to be reconsidered. Certainly, when two persons behaved in the same manner, the fact that they held very different beliefs and feelings was often observed. Dawes and Smith (1985) stated that a specific behavior representing certain attitudes held might not always be true in most people at all times. Mueller (1986) said

that the tendency to behave a certain way may be used as an indicator of attitude, but whether attitude could predict people's behavior was not always true. Defining attitude as a product formed primarily or exclusively on the basis of any one of the three types of processes, or a mix of processes was widely accepted (Eagly and Chaiken, 1993).

Although the three-component attitude model of Rosenberg and Hovland was challenged by the inconsistency found between people's affective, cognitive, and behavioral responses, the author of this study believed that it was appropriate to apply this model to investigate what the subjects believed, what they felt, and what they have implemented concerning the new curriculum. A literature review on attitude formation and change would provide a better understanding of the origin of teachers' attitudes, how attitudes are influenced, and how they might be challenged.

Attitude Formation and Change

It has been well documented that teachers have a well-developed set of beliefs about teaching even before they enter teacher education programs (Calderhead, 1991; Holt-Reynolds, 1992; Zeichner & Gore, 1990). The attitudes and beliefs that teachers brought with them into their education programs were based on cultural and cognitive knowledge they acquired during their life experiences (Brookfield, 1995). These pre-formed beliefs were created through not only educational experiences, but also social groups, family structure, religion, and geographic origin

and location. Because backgrounds vary so widely, beliefs will also vary across individuals because of personal histories and experiences (Holt-Reynolds, 1992).

Throughout the 1960s and 1970s, the dominant explanation of attitude formation and change was based on cognitive factors (Fishbein & Middlestadt, 1995/1997). To change people's attitudes toward some object, a form of persuasion was employed to change one's beliefs about the object and/or in the evaluative aspects of these beliefs. In the 1980s, belief-based views of attitude formation and change were challenged, and two routes of persuasion were noted, one emphasizing and the other deemphasizing cognitive processing (Fishbein & Middlestadt, 1995/1997). The route that emphasized cognitive processing required people to understand the arguments in a persuasive message and integrate what they had learned into an attitudinal judgment. In contrast, the route deemphasizing cognitive processing centered on the rewards or punishments associated with a message and the attractiveness or credibility of the persons who delivered the message (Haugtvedt, Petty, & Cacioppo, 1992). It has been found that if people choose the route deemphasizing cognitive processing, they tend to agree more with messages containing many arguments versus those containing few arguments, with expert communicators versus non-expert communicators, and with messages that most agree with versus those that few agree with (Chaiken and Stangor, 1987).

Researchers have studied what influences teacher attitudes, if attitudes can be challenged, and, if so, do challenged attitudes last over time. Beliefs and attitudes have a profound impact on teachers because they influence all of our perceptions and actions. Bullough (1992) stated:

> …beliefs underlay all forms of teacher knowledge; declarative, procedural, and conditional. They also underlay habits of action and interaction. Indeed all knowledge is rooted in belief (p. 24).

Stokes stated that the reason beliefs might be resistant to change was that often teachers viewed their beliefs as knowledge (Stokes, 1997). When ones beliefs are challenged, their worldviews are often challenged. Can beliefs be challenged to the extent that they might be changed? A review of the literature produced mixed results and presented several approaches in attempts to challenge beliefs.

Among preservice and inservice teachers, simple strategies such as coursework or inservices have not typically resulted in belief change (Barry & Lecher, 1995; Grant & Koskela, 1986; McDiarmind, 1992). Two studies showed that coursework alone failed to challenge pre-existing beliefs and actually reinforced negative stereotypes (Barry & Lechner, 1986; McDiarmid, 1992). Other researchers found that many of the program interventions had little effect upon the firmly held beliefs about teaching that beginning teachers brought to teacher training education (Wideen, Mayer-Smith, & Moon, 1998; Kenny, 1994). These pre-existing

beliefs were difficult to change (Holt-Reynolds, 1992; Pohan & Aguilar, 2001; Woods & Demerath, 2001) and determined what teachers perceived, learned, remembered, and forgot in teacher training courses (Woods & Demerath, 2001).

Studies that resulted in attitude change were ones in which a variety of strategies were used (Aronsohn, Carter, & Howell, 1995; Boyle-Baise & Sleeter, 2000; Fry & McKinney, 1997). In order to examine the possible impact of field experiences, Fry and McKinney (1997) conducted a study focusing on a language arts methods course that included a field experience component. Data were collected through journals, interviews, assignments, discussions, and surveys. The results showed that attitudes and behaviors were positively affected and the field experience was a significant factor in the changed attitudes. Emmanuel (2002) found that preconceived attitudes and beliefs could be challenged through a combination of coursework and a well-structured immersion field experience under the leadership of an informed instructor who could guide reflection. Two components were critical for attitudes to be challenged: self examination and reflection to discover preconceived beliefs and also the immersion field experience where the participants lived in an urban environment, teaching and working with local students from culturally diverse backgrounds.

Even when attitudes and beliefs are challenged through immersion field experiences, those changes might be temporary and revert back once the participants return to their normal

environment. To address this, researchers have suggested the establishment of support systems that would possibly reinforce the changed beliefs (Aaronsohn, Carter, & Howell, 1995). Providing support groups to pre-service teachers allowing reflection, support, and giving on-going in-service teacher development courses to increase their knowledge and skills needed to reinforce the changed beliefs were also recommended (McAllister & Irvine, 2000).

Other studies have also shown that attitudes can be challenged only when participants engage in multiple experiences (Kyriakides, 1997; Pohan & Aguilar, 2001; Teicher, 1997). These instructional activities included readings, videos, guided discussions, reflective journal writing, group brainstorming, projects, field experiences, and guest speakers. Aaronsohn, Carter and Howell suggested that it was important to have professionals or experienced teachers to be there with the student-teachers to help them process the change of beliefs.

The following section focuses on studies in the context of attitudes toward curriculum integration.

Studies on Teacher Attitudes toward Curriculum Integration

Gagne (1985) stated that if a person holds a positive attitude toward a certain thing, he/she is more likely to accept it; otherwise, he/she might reject or avoid it. Schumacher (1992) said, “Teacher attitudes toward curriculum integration might assist in the development and implementation of an integrated curriculum when teachers considered that the integrated

curriculum could help to bring the subjects together" (p. 370). Schumacher also stated, "Teacher attitudes might inhibit the development and implementation of curriculum integration, when teachers considered that an integrated curriculum might fail to cover the content and skills required by district-prescribed traditional curriculum" (p. 370).

Tipton (1997) investigated the effect of teachers' attitudes on the success of an integrated project. Tipton found that teachers' determination to overcome the obstacles played an important role in planning and implementing an integrated curriculum. In Tipton's study, while some teachers dedicatedly used the integrated approach, many others resisted the change. Tipton reported that teachers who were in support of interdisciplinary instruction seemed to be confident that they could cover basic skills and prepare their students for statewide achievement tests within the interdisciplinary instruction. Those who were against curriculum integration were concerned that their subject area might be slighted in an integrated unit. Moreover, those who believed in the value of interdisciplinary instruction would find ways to implement it regardless of class time restriction, and those who were against the integrated approach would reluctantly implement it even with time schedule for them to do so. Tipton also found that working with reluctant colleagues who would not share the workload or those who were unwilling to relinquish the autonomy of curriculum decision in team teaching was a challenge for most teachers who wanted to do integrated curriculum planning.

The effect of teachers' commitment on the success of interdisciplinary instruction was also proven to be true in Gaskins' (1994) study. Gaskins found that teachers who were not prepared to participate as members on an interdisciplinary team contributed to the lack of dedication on the teachers' parts and an eventual abandonment of the integrated project. According to Gaskins, lack of preparation for being a team member meant that teachers on the same team had not developed group skills, such as supporting, encouraging, and helping each others, and coping with the members who did not complete the designed plans for integrated projects.

Investigating factors related to teachers' negative attitudes toward curriculum integration has been of interest to researchers in recent years. Goode (1998) found that teachers were reluctant to participate in curriculum integration when (1) teachers were afraid that the basic content areas were not covered thoroughly as a result of curriculum integration' (2) teachers were skeptical about real learning taking place in curriculum integration, (3) teachers felt pressured to cover materials within their own subjects, and (4) teachers were uneasy with other teachers teaching their subjects. Goode reported that only low-level integration occurred in some situations; and in others, no curriculum integration occurred at all.

Schumacher (1992) found that teachers who were most attached to a traditional curriculum were less willing to do curriculum integration. Schumacher noticed that often

teachers were dedicated to a traditional curriculum and measured students' achievement by content areas learned and materials memorized. Schumacher suggested that labeling teachers as experts in a particular subject matter might strengthen these teachers' attachment to their own subjects, and lead to resistance in relinquishing their labeled expertise in curriculum integration. Schumacher also found that the teachers in lower-level integration teams were skeptical about whether it was worth investing their extra time and energy in curriculum integration, and this finding was also corroborated by Goode (1998). Schumacher (1992) concluded:

> If the teachers were on a supportive and caring team, curriculum integration might occur with ease; if the initiators or torch bearers brought at least one other teacher into a curriculum partnership, it might make a crucial impact … the support given to these torch bearers by the administration should increase team productivity and gather more support for curriculum integration. (p. 376).

In investigating how to nurture teachers' positive attitudes toward curriculum integration, a frequently asked question has been whether the experiences of teaching an integrated curriculum could change teachers' attitudes toward that curriculum. Studies conducted by Murphy (1993) and Tsuei (1995) showed that teachers' positive experiences of teaching an integrated curriculum might positively impact their attitudes toward curriculum integration. Murphy reported that teachers found their students better motivated to learn and demonstrated

better thinking skills in an interdisciplinary environment; moreover, the teachers felt more collegiality with their team members. Tsuei also noticed that this attitudinal change occurred regardless of differences in teachers' ages, educational backgrounds, and school locations.

The positive impact on teachers' attitudes from implementing an integrated curriculum has also been documented by Gaskins (1994), Greenberg (1995), and Hove-Pabst (1994). Greenberg compared teachers' responses of ten middle schools which used the interdisciplinary approach with those of seven middle schools which remained in departmentalized settings in the same suburban school district in California. The data collected from questionnaires showed that the interdisciplinary team teachers were more satisfied with administrative support than departmentalized teachers; moreover, the interdisciplinary team teachers felt more at ease to communicate with their school administrators, felt recognition by administrators for the work, and received more feedback from administrators about their teaching than their departmentalized counterparts.

Gaskins (1994) conducted a case study with a team of four teachers in an urban high school in the southwestern United States. Gaskins found that after experiencing team teaching embedded in an integrated project, the teachers were more likely to have positive attitudes toward an interdisciplinary environment than those who were not involved in curriculum

integration. Gaskins reported that the feeling of isolation decreased and the sense of collegiality increased as teachers interacted with each other in team teaching.

Hove-Pabst (1994) conducted a qualitative study in a rural one-room elementary school, where one classroom teacher taught a group of students across grades. The study investigated the classroom teacher's reflections on students' learning outcomes during the production process of a student opera. Hove-Pabst took part as a music teacher and helped students in creating an opera. Hove-Pabst consulted with the classroom teacher and adopted topics and materials from math, language arts, and social studies that students were currently learning in school. Hove-Pabst reported that the classroom teacher developed a positive attitude toward this researcher-initiated music-integrated curriculum and agreed that the students' abilities in problem solving, creativity, and self-esteem had improved, and their knowledge of math, language arts, social studies, and music had been enhanced.

One might also ask whether others' experiences of teaching an integrated curriculum could influence attitudes toward implementing an integrated curriculum, when one does not have actual experience with curriculum integration. The answer is important because teachers of a new integrated curriculum initiative often look upon others' opinions and experiences before they start. Grenoble (1975) stated that people form their attitudes either directly from their personal experiences or indirectly from collective experiences of other people. Grenoble added:

> "One's positive attitude adopted from the others' experiences is reinforced by the pleasantness actually re-tasted in the act of anticipating the pleasant consequences of a given type-event … Similarly a negative attitude is reinforced by the anticipation of the unpleasant consequences of another type-event" (p. 313).

If a teacher has heard about others' negative experiences of teaching an integrated curriculum, and this negative attitude is not reinforced in his or her actual experience, often the teacher would change his/her attitude. Grenoble (1975, p. 313) stated, once people recognize the need for attitude change, they would "suspend their affective dimension of attitude, and the rational appeal may be made to the cognitive dimension of attitude," a change of attitude derived from the conflict resolution between others' experiences and what they have encountered in their personal experiences.

Taiwan Teachers' Attitudes toward the New Curriculum

Several studies were conducted specifically to investigate attitude development and change toward the Taiwan National Nine-Year Integrated Curriculum. The curriculum was first introduced as an experimental project in 1999. Studies of initial teachers' attitudes were conducted by Hsieh (2001), Wang (2000), and Huang (2000). The findings on teachers' attitudes were mixed. Huang (2000) surveyed 600 teachers of 60 selected middle schools and found that 37% of the surveyed teachers objected to the curriculum integration, 25% of the teachers were

willing to implement curriculum integration conditionally, 20% of the respondents had no opinion, and 18% agreed to implement the new curriculum. Huang concluded that teachers' attitudes leaned toward negativity. Huang also found that only 6% of the respondents rated their knowledge of the new curriculum as superior or average. Huang reported a significant moderate positive relationship between the teachers' attitudes toward the new curriculum and their levels of knowledge about it. Official implementation of the new curriculum started in the fall of 2001; Huang's study was conducted in 2000, one year before the official implementation. Huang asked the teachers how long it would take to transition from the old curriculum to the National Nine-Year Integrated Curriculum. In responses, 56% of the teachers stated they might need 2 to 5 years, 10% might need 5 years and more, 18% said the implementation was impossible, and only less than 16% stated they might need 2 years and less. The teachers also expressed their concerns of being not confident in planning integrated lessons.

Hsieh (2001) collected responses from 15 educational administration directors, 26 group leaders, and 106 teachers of 5 selected elementary schools where the new curriculum had been pilot tested since 1999. Hsieh reported that 62% of the respondents considered that their school was not ready for the new curriculum, and that 85% of the respondents said that the Taiwan MOE failed to (1) give a thoughtful and consistent plan for implementing the new curriculum, (2) communicate with both parents and teachers about transition from the old curriculum to the new

one, and (3) foresee and prepare for the possible implementation obstacles. However, 65% of the teachers were found to be positive about the school administrative support they received, and the results showed a significant difference between positive and negative answers. The results showed that although teachers held significant positive attitudes toward school administrative support, they held significant negative attitudes toward the decision making of the Taiwan MOE regarding the new curriculum implementation.

Wang (2000) surveyed 288 elementary school teachers using the questionnaire developed by Murphy (1993) and found slightly-positive teachers' attitudes toward following the new curriculum. Wang further speculated that positive teachers' attitudes might increase after teachers started using the Taiwan National Nine-Year Integrated Curriculum. Wang's speculation was based on the findings reported by Murphy that as a consequence of successful participation in an interdisciplinary curriculum, teachers who were usually neutral toward the instructional impact of an integrated curriculum became positive towards it. Based on responses to the questionnaire, Wang concluded that teachers were more willing to use the integrated curriculum (1) after they received sufficient training in curriculum integration; (2) when they were provided with sufficient teaching resources and financial support; and (3) when they were given enough support from the parents and the community at large.

Attitude Summary

Rosenberg and Hovland's (1960) three-component attitude model provided a conceptual framework for attitude studies. The theory of attitude formation and change explained where teachers' attitudes came from and what influenced attitudes. Knowing what influences teachers' attitudes toward curriculum integration was important before strategies could be planned for nurturing and maintaining teachers' positive attitudes. The effects of teachers' attitudes on the success of an integrated project were documented. Not being able to keep content integrity was the main concern of teachers who were reluctant to do curriculum integration. Teachers who were most attached to a traditional curriculum were less willing to try an integrated curriculum. In investigating how to nurture teachers' positive attitudes, the positive experiences of teaching an integrated curriculum were found to be influential. What teachers had learned from others' curriculum integration experiences could change their original attitudes.

The findings on attitudes of Taiwan teachers toward the new curriculum were mixed. These reports did not examine teachers' attitudes toward the new curriculum from the music teacher's perspective, and it would be a notable contribution to find whether the music teachers had similar attitudes to the teachers in general, and whether the needs and concerns of music teachers could possibly be unique to their field.

Curriculum Integration

The Arts and Humanities Curriculum adopted the concept of integrating curriculum within subjects of music, visual arts and theater. This new curriculum marked a radical change from the previous fine arts programs in Taiwan. This change meant a major shift in the approach used by both teachers and administrators regarding how the arts are taught and how lesson preparation would be altered. Therefore, it was necessary to examine (1) background, (2) levels, (3) benefits, and (4) implementation challenges pertinent to curriculum integration from a research perspective. The first part of this section describes the background of interdisciplinary curriculum. The discussion of integration levels focuses on various definitions made by leading curriculum integration theorists. This knowledge may help the reader comprehend the structure of the National Nine-Year Integrated Curriculum. The third part describes advantages of implementing an integrated curriculum. The fourth section examines the factors associated with teachers' refusal for curriculum integration.

The Background of Interdisciplinary Curriculum

James Beane published *A Middle School Curriculum: From Rhetoric to Reality* in 1990. This book was widely referred as one of the major book which discussed using an interdisciplinary curriculum in the middle schools. Beane (1990) suggested teachers use themes emerging from the concerns of young adolescents to connect the different subjects. Beane's

recommendations were based on his observations of the ineffectiveness of middle school education. Beane stated, "The middle schools had been increasingly subjected to centralized curriculum decision-making that resulted in serious consequences for local educators: loss of self-esteem and professional efficacy, frustration, lack of commitment, and loss of curriculum planning skills" (p. 53). Objecting to the centralized prescribed curriculum, Beane stated, "The subject content in a traditional curriculum do not include all that is known; they limit our access to broader meanings, and they present a developmentally poor way to organize the curriculum" (p. 33). Beane believed that when a centralized prescribed curriculum was implemented in schools, education may only meet the goals of those who are anxious over their children's chances of entering professions. Beane suggested that an interdisciplinary curriculum may offer greater benefits to young adolescents than the traditional subject-centered curriculum because the interdisciplinary curriculum is developmentally appropriate, provides a more sensible way of organizing knowledge, and plays a vital role in the development of well-rounded students.

Levels of Curriculum Integration

Relan & Kimpston (1991) stated, "Curriculum integration can be considered along a continuum, where different levels on the continuum specify the degree or depth of integration" (p. 34). Drake (1998), Fogarty (1991), Jacobs (1989), Schumacher (1992), and Vars (1987) were leading scholars in the field of curriculum integration. Each of these authors published books

explaining levels of curriculum integration. The researcher of this study noticed shared definitions of integration levels among the five models, with different names used for same level of curriculum integration. This researcher compared the definitions of the five models and summarized them into six common levels of curriculum integration: traditional, re-sequenced, revised, themed, full integration, and child-centered and real-life experience, which can be found in Figure 1.

Figure 1

Levels of Curriculum Integration

Low	This study	Fogarty	Jacobs	Drake	Vars	Schumacher
	Traditional	Fragmented	Disciplined-based	Traditional		Departmental
		Connected				
↓		Nested				
	Re-sequenced	Sequenced	Parallel Disciplines		Correlation	Parallel Disciplines
	Revised	Shared		Fusion (topic)		
↓				Within One Subject		
↓					Fusion (new course)	
	Themed	Webbed	Complementary Disciplines	Multidisciplinary		Complementary
↓		Threaded				
	Full Integration	Integrated	Interdisciplinary-Units	Interdisciplinary		Webbed
High	Child-centered Real-life	Immersed Networked	Integrated Day Complete Program	Transdisciplinary	Core Curriculum	Integrated Learning

The pre-integration level of curriculum integration is the Traditional approach, where distinct disciplines are taught in isolation from each other. This level is the case for the Taiwanese National Curriculum prior to the change. Fogarty (1991, 1993) called this level fragmented (p. 3), Jacobs (1989) named it discipline-based (p. 14), Drake (1998) labeled it traditional (p. 20), and Schumacher (1992) designated it departmental (p. 341). Jacobs stated, "The discipline-based option is the most common format used in the United States, and both the students and the teachers are used to it" (p. 14).

The lowest integration level is the re-sequenced approach, where instructional time is rearranged to correspond with the overlapping topics of two subjects. In this instance, music teachers would use their normal instructional time to teach songs corresponding to topics learned from other academic classes. Forgarty called this level sequenced (p. 33), Jacobs named it parallel disciplines (p. 15), Vars (1987) labeled it correlation (p. 20), and Schumacher designated it parallel disciplines (p. 345). Schumacher stated, "The content itself does not necessarily change, only the order in which it appears" (p. 345).

The second integration level is the revised approach, where overlapping concepts or topics are used as organizing elements between two subjects. This level of curriculum integration revises lesson plans of two involved subjects using the overlapping concepts as an organizer. This is the case when a music teacher integrates curriculum within the arts, where curriculum

integration starts with related aesthetic concepts, related topics, related procedures in art creation, and complementary relationships within subjects. Fogarty named this level shared (p. 43), and Drake called it fusion (p. 45). Drake stated that, "Fusion occurs when specific issues or skills are infused into different subject areas. No subject area is dependent on any other area" (p. 45). It is noted that fusion was also used by Vars (1987) to denote a more advanced level of curriculum integration. Vars defined the fusion level of curriculum integration as a new course which blended two or more related subjects.

The third integration level is the theme approach, where teachers use themes to integrate two or more related subjects. In addition to revising lessons plans to teach overlapping concepts, teachers choose themes as organizing principles to guide curriculum integration. This level of integration is used in related subjects, such as music and visual arts, science and math. This is the concept used in the new Taiwan National Nine-Year Integrated Curriculum, where related subjects are integrated into one learning area. Fogarty called this level webbed (p. 53), Jacobs named it complementary disciplines (p. 16), Drake labeled it multidisciplinary (p. 50), and Schumacher designated this level complementary (p. 348).

The fourth integration level is the full integration approach, where a full range of subjects is integrated. In this level, all teachers involved work together to connect subjects. This is the ideal case when curricula are integrated across seven learning areas of the new Taiwan National

Nine-Year Integrated Curriculum. Fogarty labeled this level integrated (p. 75), Jacobs named it interdisciplinary units (p. 16), Drake called it interdisciplinary (p. 60), and Schumacher designated it webbed (p. 353). Schumacher explained, "All of the disciplines on a team are brought together to investigate a theme … the team teachers determine a theme that will be of high interest to the students" (p. 355).

The highest integration level is the child-centered and real-life approach. This level centers on students' needs, and it also allows the students to select issues for learning. This level corresponds to the ideal outcomes of implementing the Taiwan National Nine-Year Integrated Curriculum, where teaching materials are chosen to fit students' interests, needs, abilities, and experiences, and lessons are developmentally appropriate for students, with sequentially ordered content. Fogarty called it immersed and networked, Jacobs labeled it integrated day (p. 17) and complete program (p. 18), Drake named it transdisciplinary (p. 92), Vars labeled it core curriculum (p. 23), and Schumacher designated it integrated learning (p. 357).

Fogarty said "Immersed level views the curriculum through a microscope … it filters all content through the lens of interest and expertise … in this level, integration takes place within learners, with little or no outside intervention" (p. 109). Fogarty's highest level of integration, the networked, allows the students to initiate and direct the integration process. Fogarty stated, "In the networked model of integration, the learner directs the integration process through

self-selection of the needed networks. Only the learners know the intricacies and dimensions of their fields can target the resources, as they reach out within and across their areas of specialization" (p. 96).

In Jacobs's integrated day, a full day program was created based on a theme emerging from students' real-life experiences. Time was structured to best fit students' learning. Jacobs's highest level of integration, complete program, encouraged students to live on campus, and the curriculum was centered on materials and issues from students' everyday activities. A sense of independence and self-discipline was emphasized in this level of curriculum integration. It required a full commitment from parents and school personnel.

Drake's highest level of integration, transdisciplinary and Vars's highest level, core curriculum, presented real-life issues as learning materials. The students designed curriculum emerging from their personal learning and life experiences, with their teachers acting as advisors. Schumacher's highest level, integrated learning, considered that learning should be generated by the students with teacher assistance. Schumacher explained, "The ideas for the issues, topics, or themes generated by the students are based on their personal and social concerns" (p. 359).

Fogarty's model covered ten levels for curriculum integration. In addition to the seven levels described, there were two additional levels, connected and nested, located between the fragmented and the sequenced levels of integration; the threaded level was located between

webbed and integrated levels. The connected and nested levels represented integration within the same discipline. Fogarty stated,

> In [the] connected level, the disciplines remain separate … It focuses on making connection within each subject area- connecting one topic, one skill, one concept to the next. The nested level targets multiple dimensions of a lesson. It takes advantage of natural combination (pp. 104-105).

Fogarty speculated that in the nested level a teacher might target a social skill, a thinking skill, and a content-specific skill in one discipline. Between the webbed and integrated levels, Fogarty added the threaded level: "This level threads thinking skills, social skills, study skills, graphic organizers, technology, and a multiple-intelligences approach to learning throughout all disciplines" (p. 107). The author speculated that this level would not include a full range of subjects, which was characteristic of the next advanced level, the integrated model; but it was a more advanced model than the lesser level, the webbed model, where the teachers only used themes to connect subjects.

Through observation of team meetings and interviews with each team member, Schumacher (1992) found an alternative way to categorize levels of curriculum integration. Instead of categorizing a school into a single integration level, Schumacher suggested that using a bar-type graphic display might better show the actual frequency of the team's engagement in

curriculum integration activities designated for different levels. For example, one team, labeled as the highest integration level, showed two counts of departmentalized activities, two counts of reinforcement activities, five counts of complementary activities, two counts of webbed activities, and five counts of integrated learning activities. Among a total of sixteen observations, only five occurrences belonged to the highest level, integrated learning; the rest of the observations were scattered among the other integration levels. Another team, labeled at the departmentalized level, had ten counts of departmentalized activities, two counts each of reinforcement, complementary, and webbed activities, and zero count of an integrated learning activity. Schumacher speculated that when a team was labeled at a designated integration level, it merely implied that the team integrated curriculum at that designated level more frequently than on the other levels. The high-integration team scored the most at the highest level of integration, yet this team still engaged in lower-level activities. Even though the low-integration team scored the most at the lowest level of integration, this team engaged in higher-level integration activities, as well.

Benefits

Much work has been done to investigate student academic achievement while participating in an integrated curriculum; however, the results have been mixed. Improved scores on science (Jablon, 1989), reading (Boyd, 1994; Hartzler, 2000; Smith, 1984), math (Boyd, 1994; Hartzler, 2000; Smith, 1984), and overall GPA (Padilla, 1997) have been reported. On the other

hand, a number of studies found no improvement after receiving an integrated curriculum (Ernest, 1991; Murphy, 1993; Nesin, 2000). A number of studies showed that integrating music into classroom instruction might improve students' scores in the areas of language proficiency (Hart-Davis, 1994; Kelley, 1981; Lacroix, 2002; Mashack-MaCant, 1988), math (Smith, 1984), music (Laxroix, 2002), and social studies (Waller, 1997). However, Lacroix reported that the improvement found was not significant. Because these studies were varied in terms of students' backgrounds, methods of integration, program evaluation, and length of program, it was understanable that their findings were mixed.

The effect of an integrated curriculum on students' non-academic outcomes was examined by Quinn (1995) and Boyd (1994). Quinn observed four interdisciplinary teams over a two-year period and found that (1) the students usually received more attention from the teachers and had a better learning environment because the teachers could identify the students' problems sooner; (2) the students were likely to feel safer and more familiar with one another; (3) the parents could meet with all four team teachers in one parent/teacher conference; and (4) the parents could better envision themselves as partners with their child's educational team. Boyd surveyed 232 teachers and 35 administrators from 22 school districts in 11 counties in New Jersey. and reported that by teaching math and language together, the students improved their

academic performance, self-esteem, critical thinking abilities, and participation in group decisions.

The benefits for teachers from participating in an integrated curriculum were examined by Gaskins (1994), Greenberg (1995), and Quinn (1995). Gaskins interviewed a newly formed team to see how team-teaching influenced teachers' feelings of isolation and collegiality and found that isolation decreased and collegiality increased as the teachers interacted with each other over time. Greenberg reported that teachers from schools which used a team-teaching format showed more satisfaction with administrative support than those who were from schools which remained in departmentalized settings. Quinn reported three benefits for the teachers: (1) the teachers might feel increased support and care from team members, (2) they had more student-teacher contact and (3) teachers could identify and correct students' problems more efficiently.

Implementation Challenges

After systematically observing and documenting the process of implementing an integrated curriculum in the schools, Gaskins (1994) and Tipton (1997) reported that teachers' commitment and willingness to make an integrated curriculum work was an essential component for successful curriculum integration. Tipton found that negative attitudes held by many teachers were the most influential obstacles to successful curriculum integration. Gaskins reported that

the integrated curriculum being studied was abandoned due to teachers' lack of commitment to its success, which resulted from their lack of interest in teaching an interdisciplinary program. The lack of interest was because their priorities in teaching were elsewhere, other than the integrated project. Gaskins reported that many teachers thought it was a juvenile program that should never have been implemented at the high school level, and it was not worth the additional time and effort spent planning and meeting. The actions of the teachers who had no desire to take part in the program negatively influenced the other team members, and they expected failure from the program.

Much attention has been focused on why teachers refused to initiate, develop, and maintain an integrated curriculum. The implementation challenges identified are (1) lack of supportive team teachers and administrative personnel (Goode, 1998; Schumacher, 1992); (2) lack of a leader initiating the integration process (Schumacher, 1992); and (3) difficulty in scheduling a common planning time (Goode, 1998; Miller, 1995; Stewart, 1997; Whitaker, 1996). Goode found that the teacher turnover rate was high in the schools being studied, thus new teachers were usually unfamiliar with the integration process and their teaching partners. Therefore, teachers felt uneasy in teaching together as a team, and no one assumed the role as the initiator.

Scheduling a common planning time for music teacher with teachers of other academic subjects was found to be difficult in studies conducted by Stewart (1997) and Whitaker (1996). Stewart and Whitaker reported that common time for team planning was usually scheduled at a time when the arts specialists were teaching classes in the schools being studied, and this scheduling conflict resulted in the absence of arts specialists in team planning. From time to time, the arts specialists were isolated from their team teachers. Furthermore, Miller (1995) found that when a music teacher belonged to several teams, and those teams worked on different topics at the same time, music teachers were overwhelmed in matching their music class with all the different teams.

Possible challenges pertaining to the concerns of curriculum integration were (1) teachers' fears of not being able to cover basic skills thoroughly (Goode, 1998; Miller, 1995; Tipton, 1997); (2) teachers' uneasiness with allowing other instructors to teach their subjects (Goode, 1998); (3) teachers' feelings of pressure to cover required subject content areas (Goode, 1998; Schumacher, 1992; Tipton, 1997); (4) concerns with increased student discipline problems (Gaskins, 1994; Goode, 1998); (5) teachers' lack of sufficient preparation time for curriculum planning (Dougherty, 1999; Floyd-Levin, 1995; Gaskins, 1994); and (6) teachers' difficulty in student assessment (Floyd-Levin, 1995). In some studies (Gaskins, 1994, Goode 1998; Tipton,

1997), teachers resistance to curricular integration was because they thought curricular integration was a burden which disrupted up their school routines.

Curriculum Integration Summary

Curriculum integration offered greater benefits to young adolescents than the traditional curriculum because it was developmentally appropriate, provided a more sensible way of organizing knowledge, and was good for the development of well-rounded students. This was also why the Taiwan Minister of Education proposed using the concept of curriculum integration in the new national curriculum.

Several commonalities were found within the levels of curriculum integration proposed by Fogarty (1991), Jacobs (1989), Vars (1987), Schumacher (1992), and Drake (1998). A synthesis of these five models includes six common levels. The pre-integration level, a traditional approach where distinct disciplines were taught in isolation from each other, was the case for the Taiwanese National Curriculum prior to the change. The lowest integration level, a re-sequenced approach in which instructional time was rearranged to correspond with the overlapping topics of two subjects, was demonstrated by music teachers rescheduling time to teach certain songs corresponding to topics learned from the other classes, prior to the curricular change. The second level, a revised approach in which overlapping concepts were used as organizing elements between two subjects, demonstrated by a music teacher planning lessons

with the visual arts teachers prior to the curricular change. The third level, a theme approach, in which the teachers used themes to integrate two or more related subjects, was the concept used in the new Taiwan National 1- 9 Integrated Curriculum, where related subjects were grouped into one learning area. The fourth level, full integration, and the highest level, child-centered and real-life experiences approach, were the ideal outcomes of implementing the new curriculum. In addition, Schumacher's (1992) new way to show a team's engagement in curriculum integration described that when a team was labeled at a designated integration level, it merely implied that the team integrated curriculum at that designated level more frequently than on the other levels.

The benefits of integrating curriculum that were found justified the switch from using traditional curriculum to an integrated curriculum, according to the Taiwan Minister of Education. Due to the differences in students' background being studied, the formats and length of curriculum integration being investigated, and the program evaluations being used, the findings on the effects of receiving integrated curriculum on the students' academic improvements are mixed.

Implementation challenges found in previous studies might possibly give references for the Taiwan MOE to better identify potential challenges in new curriculum implementation, and to better overcome those challenges. The implementation challenges found in previous studies were (1) insufficient support from the team teachers and the administrators; (2) weak leadership

in team teaching; (3) common planning time schedule conflicts; (4) questioning the value of curriculum integration; (5) unwillingness to lose subject integrity; (6) difficulties with student discipline and assessment; (7) insufficient teacher preparation time; and (8) fear of not covering basic skills.

Arts Integration

The Arts and Humanities Curriculum of Taiwan covers the teaching and learning of music, visual arts, and theater. The guidelines stipulate that "the learning of Arts and Humanities subjects should address the individual arts, and together the arts should promote, connect, and integrate the learning of other academic subjects" (Taiwan MOE, 2004, p. 1) Music teachers were asked to connect or integrate learning of visual arts, theater, and other subjects into music instruction, and thus support learning of other subjects. In the next section, the description of Newman's (1996) and Bresler's (1995) models of arts integration clarify the definition of arts integration currently used in the field of education.

Level of Arts Integration

Newman's (1995) and Bresler's (1995) models of arts integration were the models most frequently referred to in the educational field. Newman's model was based on observation at four elementary schools. Newman found that principals and teachers at schools of the highest integration level exhibited the strongest commitment to create an educational environment that

encouraged students' creativity, self-awareness, and self-expression, through an appreciation of the arts. Newman's model on arts involvement included five kinds of arts curriculum: (1) the arts-absent curriculum that does not involve arts education; (2) the nominal curriculum that employs fine arts only as a vehicle towards non-arts ends; (3) the arts discipline-based curriculum, where fine arts are taught as separate subjects; (4) the correlated arts curriculum, in which some topics are shared between fine arts subjects and the other disciplines, but without further ongoing connections; and (5) the arts-integrated curriculum, where academic subjects are connected through the use of an art form, yet the technique, historical, and aesthetic values of individual fine arts are still maintained in their integrity.

Applying this model in describing the curricular practices in Taiwan, Newman's (1995) arts discipline-based curriculum was the best portrayal for Taiwan schools prior to the curriculum change. The students received separate instruction in music and visual arts, in addition to their learning of other academic subjects, with few connections between subjects. The arts-integrated curriculum was the concept intended in the new Taiwan National Nine-Year Integrated Curriculum. However, when integration between the fine arts and the other academic subjects changed, the curricular practice fell into the correlated arts curriculum. Also, when the primary focus is on learning of academic subjects other than the fine arts, it became a type of nominal curriculum which Newman described.

Through a three-year intensive observation of music and arts instruction in selected elementary schools, Bresler (1995) published three articles describing the use of fine arts in elementary schools. According to Bresler, the practice of integrating fine arts in the classroom instruction combines two, three, or even all styles at various stages over time. Bresler's model of arts integration has four styles, namely affective, social integration, co-equal, and subservient. A description of each style can be found in the following paragraphs.

The affective style of arts integration has been documented as having two subcategories: a change of mood and an expression of creativity. The mood-altering activity may occur when teachers play music as a background for students to calm down after recess, or to focus on their seatwork. According to Bresler (1995), listening to music in the classrooms may not involve teacher guidance or class discussion, with purpose of playing music to change students' mood and to transiton them to the next activity. The creativity-expression activity would occur when teachers play music as a stimulus to inspire students to dance, to draw, or to tell a story. Bresler stated, "The affective style was mostly seen in the primary grades, K-2 grades" (p. 35). According to Bresler, in this style, the purpose of using music in the classroom would not be to acquire specific knowledge or skills in the music; instead, the music would be used for relaxation, concentration, and inspiration.

Social integration style has been documented occurring when the fine arts are treated as an appropriate vehicle for communicating with parents and the community. Bresler (1995) found that the social integration style was most welcomed by school principals. The best example would be the choir show for a PTA meeting and holidays. Less emphasis would be placed on educating the audience or performers, with more emphasis placed on the eye-catching qualities of the musical performance. Bresler stated, "The subservient and social integration styles fit existing practices of arts in the school … and do not require any major changes in teacher thinking and attitudes" (p. 36).

The co-equal style is documented as referring to arts integration where the subjects involved share equal amounts of content and time. This was the least common style found in Bresler's (1995) study. According to Bresler, this style must be carried out by classroom teachers with extensive artistic background, or team-teach with music specialists. The classroom teacher and the music specialist would ensure that both musical and academic subject content areas would be covered. This could be achieved by expanding students' knowledge and skills in the targeted subjects, as well as in music. Applying this definition to the curricular practice in Taiwan, this style would represent the ideal case of curriculum integration asked by the new Taiwan National Nine-Year Integrated Curriculum. However, it would be difficult if not impossible to guarantee equal amounts of content and time. The fine arts teachers often take

supportive roles in integrating curriculum with the academic teachers, unless the fine arts teachers initiated the integration. When fine arts materials were used to address the learning of other subjects, the arts integration would become an example of Bresler's subservient style, mentioned in the next paragraph.

The subservient style of arts integration has been noted to occur when the arts serve to enhance other subjects. This was the most common style found in Bresler's (1995) study. According to Bresler, this style was usually present in classrooms where classroom teachers had little training in the fine arts. Classroom teachers included music materials in teaching academic subjects by providing the students with different modes of representations other than verbal and numerical, and thus hoped to reach students with different learning styles. Bresler reported that classroom teachers often used music as a tool for teaching core academic curriculum. Even when classroom teachers team-taught with music specialists, classroom teachers usually took the dominant role in the curriculum planning process.

Concerns in Arts Integration

"An integrated curriculum might dissolve subject boundaries, assist students in making learning connections between disciplines, and helps them see learning in a holistic rather than fragmented way," said Brazee and Capelluti (1995, p. 10). In addition, teachers experience professional growth through the curriculum development process (Gaskins, 1994; Greenberg,

1995; Quinn, 1995). However, while integrating the fine arts with other academic subjects, the following concerns were noted: (1) using fine arts mostly as a vehicle for learning other academic subjects (Brewer, 2002; Smith, 1995); (2) not being able to give equal attention to the subjects integrated (Corn, 1993; Gale, 1990; Seger, 1998); and (3) devaluing music and art as distinct disciplines (Barrett, McCoy, & Veblen, 1997).

Brewer's (2002) review of curriculum integration reports showed that 394 out of 479 arts integration studies used the fine arts mostly as a vehicle for enhancing learning in academic disciplines. Brewer reported that teachers often used an arts-integrated curriculum as a means to bring about greater knowledge in history or social studies, and that curriculum integration inadvertently produced a negative environment for the fine arts subjects. Brewer pointed out that the general public usually had a misconception that the arts were not as important as academic subjects and school authorities were amenable to reducing arts classes when necessary. Without exception, the status of music education in Taiwan is secondary to the core subjects.

After MENC publicized the *National Standards for the Arts* in 1994, Smith (1995) was concerned that the schools might misinterpret the Standards and as a result, music teaching would inevitably become a learning tool for the academic subjects. Smith wrote,

> The policymaker might magnify certain aspects of the Standards at the expense of more important ones that have a direct bearing on teaching the fine arts, because one of the

> most important goals the Standards intend to achieve is to help the students make connections across subjects (p. 22).

By overemphasizing the functions of the fine arts in correlating, informing, and enhancing the study of other subjects, Smith was concerned that arts education itself might become diffused and diluted. Smith suggested that arts integration should occur only within the teaching of the fine arts as serious subjects. Smith added, "I have no problem with the use of the fine arts in other subjects, as long as it is realized that such use constitutes neither arts education nor a substitute for it" (p. 22).

Several studies showed that when two teachers developed an integrated curriculum, it was difficult to devote an equal amount of attention to both subjects. Corn (1993) found that the status of the subject matter in the school determined the direction of curriculum integration. In Gale's (1990) study, classroom teachers were found to insist that the learning of the academic subjects should not be sacrificed for music. Seger (1998) found that instructional time and subject content areas integrated favored the academic subjects over music. By not including music in the nationwide school entrance exams, it might be likely that music would be considered at a lower status in schools than exam-related subjects. As a result, an equal amount of content and time in an integrated curriculum might be difficult to achieve.

Barrett, McCoy, and Veblen (1997), included a chapter entitled "Music and the Interdisciplinary Curriculum" in their book *Sound Ways of Knowing.* This chapter described three possible drawbacks for music and arts in a curriculum integration process: (1) superficiality, (2) diffusion, and (3) replacement. They stated, "As an arts-integrated program was broadened, the fear of superficiality set in" (p. 23). If fine arts are integrated with other subjects, the instruction time might be insufficient to allow coverage of the fine arts to the same depth as when these areas are taught in a separate class. Barrett, McCoy, and Veblen were concerned that the importance of the fine arts would be lessened if they are used as a means of teaching academic subjects. In addition, the focus on fine arts became blurred when they were combined with different perspectives. They added, "An arts-integrated program might easily be seen as a replacement for the comprehensive arts curriculum" (p. 23). Because music and the arts can successfully permeate the entire curriculum, principals and classroom teachers often favor teaching the arts across disciplines, and the possibility they might eventually replace music and arts classes with the arts-integrated program.

Discipline-Based Arts Integration

As Barrett, McCoy, & Veblen continued, "Interdisciplinary curriculum should be based on strong sequential programs of instruction in the individual art forms" (1997, p. 76). They asserted that only when a non-compromised, sequential, and strong fine arts curriculum is

secured would an arts-integrated curriculum be free from criticism of superficiality, diffusion, and replacement. A more conservative view was expressed by Stake, Bresler, and Mabry (1991), who insisted that schools should focus on Discipline-Based Arts Education, because integrating music or arts with other academic subjects might result in ignoring the learning of music and the other arts. Stake et al. firmly stated that the fine arts should be taught as serious subjects. From October, 1987, to December, 1990, they conducted an ethnographic study sponsored by the National Endowment for the Arts and the U.S. Department of Education, regarding the way the fine arts were taught in general classrooms. After three years of regular observations in eight selected schools, including one middle school in Washington, D.C. and seven other elementary schools in Illinois, Texas, New Hampshire, Pennsylvania, and California, they compiled their findings and published the book *Custom and Cherishing* (1991). This book described how visual arts, music, dance, and theater were addressed by classroom teachers, music teachers, and arts specialists. Stake and his colleagues reported that most classroom teachers used materials on visual arts and music largely as a motivator and an illustrator of something important, other than music and arts. In only a few instances was the artistic purpose of music and arts teaching realized to its fullest extent. Stake et al. found that the inclusion of music and the arts through curriculum integration appeared to be of little value in meeting authentic arts goals. Therefore, they suggested that a Discipline-Based Arts Curriculum should be reinstated in the schools.

Echoing Stake, Bresler, and Mabry was an article written by Wiggins and Wiggins (1997), who advocated reinstating a non-compromised, discipline-based music curriculum in schools. They were not against the music-integrated curriculum; rather, they acknowledged benefits of implementing a music-integrated curriculum, and suggested a new way of integrating music with other subjects without losing music's subject integrity. Wiggins and Wiggins proposed using conceptual connections instead of content connections, saying that the logical way to make connections among different disciplines was not to connect knowledge [the content], but rather to connect the ways in which people come to understand the knowledge [the concept]. Wiggins and Wiggins used the following example to explain the conceptual connection:

> While learning about conflict, the students might study the ways in which humans dealt with conflict and its resolution, in history class; in science class, students could learn the effects of various kinds of opposing forces; in music class, the students experienced dissonance, consonance, and harmonic resolution. (p. 41)

Wiggins and Wiggins (1997) suggested that a thematic approach using cognitive and affective connections should be used in an integration process. They added, "Themes such as freedom, conflict, or affinity (might) apply across many disciplines … each discipline might maintain its integrity because this approach emphasized concept building and avoided replacing one's curricular content areas with the content areas of another" (p. 41). Instead of spending

extensive time in team planning, the concept-connection theme would help to guide each teacher in curriculum planning independently in his and her own classroom as part of their individual lesson planning time. A by-product of conceptual connection would be the elimination of the inconvenience in scheduling a common planning time for all teachers.

Arts Integration Summary

In this review of arts integration, both the benefits and challenges of arts integration were noted. Models of arts integration by Newman (1996) and Bresler (1995) were mentioned. Newman's arts discipline-based style was the model for the Taiwanese National Curriculum prior to the change, and arts-integrated style was the model used in the new Taiwan National Nine-Year Integrated Curriculum. Bresler's co-equal style was the ideal example for the new Taiwan National Nine-Year Integrated Curriculum. The subservient style was the most common practice found in curriculum integration studies conducted by Brewer (2002), Barrett, McCoy, and Veblen (1997), and Smith (1995).

National Music Curriculum of Taiwan

This section presents an overview of the newly adopted Arts and Humanities curriculum and the National Music Curriculum previously used in Taiwan junior high schools. This section contains (1) a description of the Arts and Humanities curriculum and a portion of the National Nine-Year Integrated Curriculum; (2) a description of the Music Curriculum of the National

Junior High School Curriculum, in use from 1968 to 2004; and (3) a comparison between the two curricula.

Arts and Humanities Curriculum

History.

The timeline for the construction of the Arts and Humanities Curriculum was interrelated with the construction of the National Nine-Year Integrated Curriculum. Briefly introducing the timeline for the construction of the National Nine-Year Integrated Curriculum would also describe the birth of the Arts and Humanities Curriculum.

In April, 1997, the Taiwan MOE initiated a curriculum reform and formed a Special Panel on the Development of Elementary and Junior High Schools Curriculum [國民中小學課程發展小組]. According to government records, their major task was to construct a new curriculum covering "shared components of the current curricular structure of elementary and junior high schools" (The Taiwan MOE, 2004, p. 3). The panel members formulated the Provisional General Guidelines for National Nine-Year Integrated Curriculum [九年一貫暫行課程標準總綱] in September of 1998. The Provisional National Nine-Year Integrated Curriculum included ten curriculum goals, ten core competencies, and a description of seven learning areas. The subject combinations of the seven learning areas can be found in Figure 2.

In October of 1998, the Taiwan MOE dismissed this panel and formed seven Panels on Researching and Formulating Learning Areas [各學習領域綱要研修小組]. The Provisional Arts and Humanities Curriculum was announced in November of 1999, and included seven Competency Indicators for music, ten for visual arts, and nine for theater, to be used for the junior high school level.

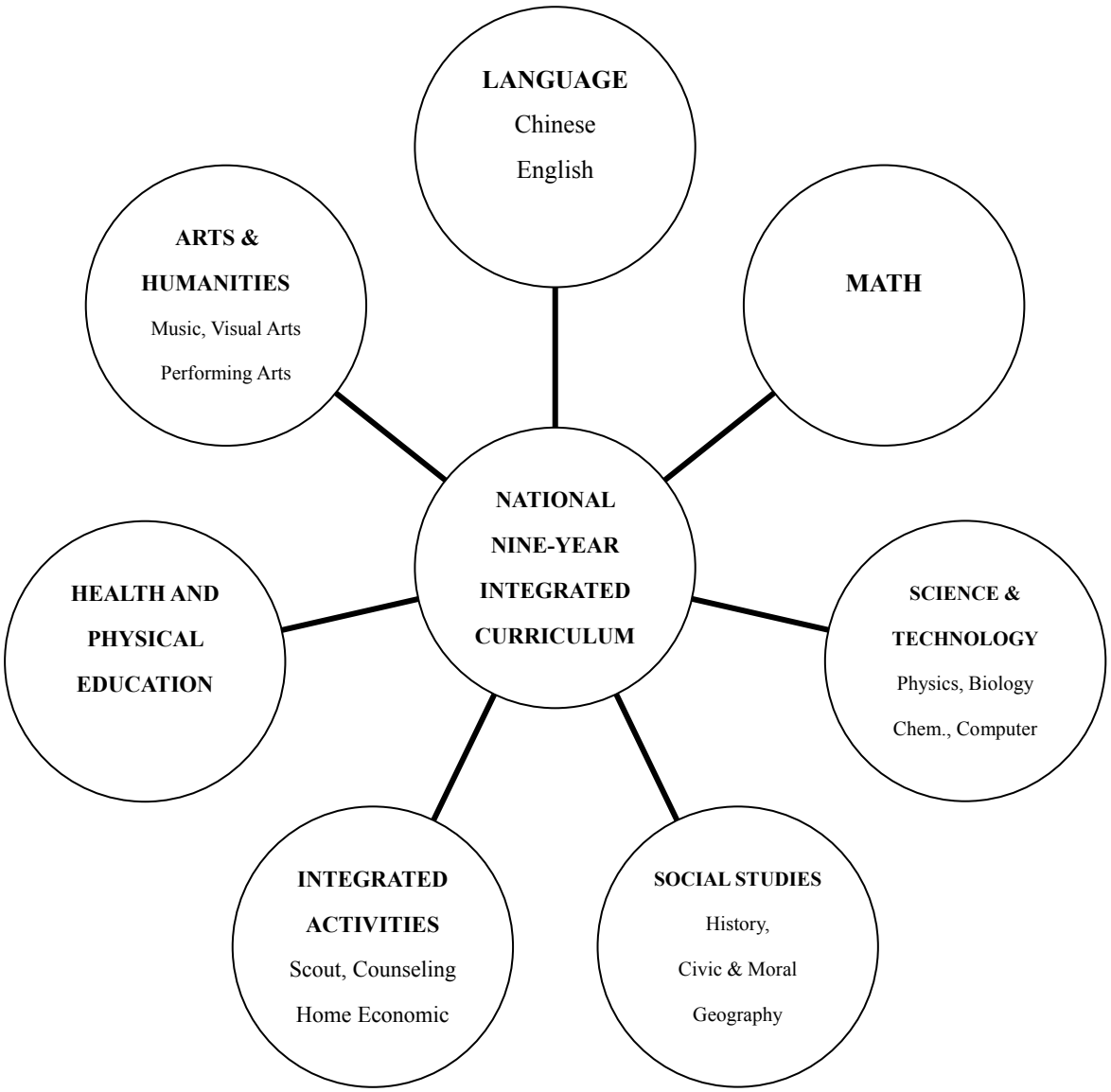
In December of 1999, the Taiwan MOE dismissed the seven Panels and formed a Review Committee on Revision and Formulation of Curriculum [課程修訂審議委員會]. To revise the Provisional National Nine-Year Integrated Curriculum [九年一貫暫行課程], this committee planned several coordinating projects. One project was the 2-year pilot implementation in selected schools, starting in September of 1999. Principals from 99 junior high schools responded to this pilot implementation in exchange for additional financial support from the MOE. These schools spent their first year preparing teaching materials, discussing team teaching formats, and developing a working curriculum for their second year. During the second year, they implemented the integrated curriculum. Starting in the fall of 2001, teachers of first graders at all schools were asked to follow the Provisional National Nine-Year Integrated Curriculum.

After reviewing the outcomes of pilot implementation since 1999, the committee members developed seven curriculum guidelines for seven learning areas [各學習領域的課程綱要], which was announced by the Taiwan MOE in January of 2003. This time, the Arts and

Humanities Curriculum stipulated that a set of 17 Competency Indicators designated for junior high school level should be shared with three arts related subjects, for the purpose of resolving the subject boundaries within the fine arts.

Figure 2.

Subject Combinations of Seven Learning Areas for National Nine-Year Integrated Curriculum



Later in June of 2004, the MOE announced the National Nine-Year Integrated Curriculum [九年一貫課程]. A revision on competency indicators within the Arts and Humanities curriculum was announced at the same time. In March, 2006, the MOE announced the first revision of National Nine-Year Integrated Curriculum [九年一貫課程修正版] proposed by the Review Committee. This revision did not involve the Arts and Humanities curriculum.

Scope and content.

The Arts and Humanities curriculum covered the instruction of music, visual arts, and performing arts (drama, theater, and dance). It included three instructional goals and eleven competency indicators, which specified the minimum requirements that students should be capable of completing by grade nine. The instructional goals and competency indicators designated for seventh to ninth grades, included in Table 1, were interpreted and translated by this researcher from government-published documents. It was noted that in June of 2004, a revision of the Arts and Humanities curriculum was announced, and there was a change on seventeen competency indicators. The competency indicators were rearranged, and the number of competency indicators was decreased to eleven. The comparison of competency indicators between curricula announced in 2003 and 2004 can be found in Appendix A.

Based on the interpretation of three instructional goals, the researcher of this study speculated that this curriculum was designed to strengthen students' knowledge of the

relationships among the arts, the environment, and the self through aesthetic activities; and this curriculum was also designed to promote students' participation in the arts by inspiring their imagination, creativity, and appreciation for the arts. Based on the interpretation of the eleven competency indicators in the context of music learning, the researcher of this study speculated that the students should be able to (1) make music to express their personal values and to exercise their analytical abilities; (2) understand how music relates to the society by learning the cultural and historical background of when a piece of music was created; (3) describe the content, forms, and characteristics of music; and (4) use modern technology to research and share musical topics with others.

Implementation.

For curriculum integration, the curriculum guidelines stated,

> Curriculum integration within the arts might start with (1) related aesthetic concepts, (2) related topics, (3) related procedures in art creation, and (4) complementary relationships within subjects … materials was chosen to fit students' interests, needs, abilities, experiences, and the school's resources … lessons should be developmentally appropriate for students, with sequentially ordered content (Taiwan MOE, 2006, pp. 6-7).

Instruction in ear training, score reading, group singing, instrumental playing, music composition, and music performance were listed as required musical content areas, but the sequence of

teaching these content areas by grade levels was not specified in the guidelines. The guidelines also suggested that "using both quantitative and qualitative evaluation in student assessment, including observations, interviews, tests, self-evaluation, group discussion, and portfolios" (Taiwan MOE, 2006, p. 7). It was also suggested that music teachers compile teaching materials; however, based on the researcher's consultation with music teachers being studied, the researcher found that they often used textbooks written by local publishers.

Table 1

Instructional Goals and Competency indicators of the Arts and Humanities Curriculum

Instructional Goal	Description	*Competency indicators*
Explore and Express	Exploring the relationship between self and environment; and create works of arts using appropriate materials and forms	1. (a). Understanding the relationships between an original work of (a). art with society and culture. (b). Creating an original work of art using resources from music, visual arts, and theater. (c). Using works of art to nurture the ability for independence and analytical thinking. 2. (a). Using suitable resources and techniques from music, visual arts, and theater to express personal and/or group feelings and values. (b). By way of listening and/or performing a work of art to observe and sense peoples' feelings an responses. (c). Using creative art works to develop the capacity for expressing one's uniqueness. 3. Using a variety of artistic resources to explore the stylistic differences between traditional and non-traditional music, visual arts, and/or theater. 4. Combining fine arts and multi-media to create works of art to express the artist's values and apply to everyday life.

Table 1 (continued)

Instructional Goals and Competency indicators of the Arts and Humanities Curriculum

Instructional Goal	Description	Competency indicators
Aestheticism and Understanding	Using aesthetic activities to perceive artistic values, styles, and cultures intuitively; treasure works of art; and participate in multicultural arts activities.	1. Using arts education to teach students how to appreciate and analyze the beauty in nature, man-made surroundings, and works of art. 2. Using arts education to teach students how to distinguish and describe the content, forms, and characteristics of various forms of art. 3. (a). Using arts education to teach students how to experience and differentiate between classical and modern arts, and between popular and elite arts (b). Using works of art to teach students the lifestyle and values of people from different historical periods and cultural orientation. 4. Using modern technology to collect arts-related information from around the world in order to understand trends of modern art and to learn about other cultures.
Implementation and Application	Understanding the relationship between the arts; strengthen environmental perception through arts activities; recognize careers and expand visions of the arts; respect and understand artistic creations; and apply that knowledge to their lives.	1. Using arts education to help students develop interests and hobbies toward arts performance and arts appreciation. 2. Using arts education to help students select an arts activity that corresponds with their personality, interests, and abilities; and to pursue it. 3. Using organized concerts, theater performances, and art shows to help students cultivate initiative, cooperation, mutual respect, self-disciple, communication, and leadership.

Music Curriculum

History.

Prior to the National Nine-Year Integrated Curriculum, junior high schools used the National Junior High School Curriculum. The National Junior High School Curriculum was implemented in 1968 and was revised four times, in 1972, 1983, 1985, and 1994. Only the revisions of 1972 and 1994 involved the contact hours of music class; the other two revisions did not involve music instruction. The instruction time for music was two 50-minute classes for seventh graders and one 50-minute class for eighth and ninth graders. The instructional time for seventh graders was reduced to only one 50-minute class in the 1972 revision, and increased back to two 50-minute classes in the 1994 revision. According to the guidelines published by Taiwan MOE (1994, pp. 2-3), music was one of 21 subjects taught in the junior high schools.

Scope and content.

The guidelines described the sequence of basic music knowledge and skills to be taught at grades seven, eight, and nine. These musical content areas included music theory, music fundamentals, singing, instruments, music composition, and music appreciation. The sequence of teaching these content areas, suggested by the guidelines, can be found in Table 2.

Table 2

Content Areas of Music Curriculum, a Portion of National Junior High School Curriculum

Category	Content Areas (by Grade level)
Theory	(1) Rhythm/Note value: review of notes and rests learned in elementary school (seventh), tied notes (eighth), syncopation (eighth), up-beat (eighth), and down-beat (eighth). (2) Time signatures (seventh): a. Review of time signatures: 2/4, 3/4, 4/4, 3/8, 6/8. b. Recognizing the difference between simple and compound meters. (3) Musical staff: grand staff (seventh), simplified score (eighth), transcribe simplified score to musical staff, and vice versa (eighth). (4) Note names and solfege: musical alphabets (seventh), fixed-do (seventh), and movable-do (eighth). (5) Recognizing intervals (seventh): whole step, half step, and accidentals. (6) Tonality: a. C major, G major, F major (seventh). b. Relationship between major and minor (eighth). c. Chinese pentatonic scale (ninth). d. Major triad (ninth). e. Dominant seventh (V7) (ninth). f. Cadence (ninth): perfect (I-V-I), incomplete (End in VI), and half (End in V). g. Transposition (ninth). h. Musical terms and signs from the textbooks (seventh to ninth).

Table 2 (continued)

Content Areas of Music curriculum, a portion of National Junior High School Curriculum

Category	Content Areas (Grade Level)
Fundamentals	(1) Vocal warm-up and routines (seventh to ninth). (2) Ear training: interval, harmony, and timbre in two-part cadence singing (seventh), in three-part cadence singing (I-IV-V-I) (eighth), major scale, minor scale, and Chinese pentatonic scale (ninth). (3) Sight-singing: treble clef (seventh), C major/G major/F major (seventh and eighth), minor scale/accidentals (eighth), and transposition (ninth). (4) Rhythm practice: 2/4, 3/4, 4/4, 6/8 (seventh), up beat/down beat (eighth), syncopation (eighth), and multiple voices (ninth). (5) Notation and Dictation: Copy music from music textbook (seventh), write down music from listening (eighth and ninth). (6) Conducting: 2/4, 3/4, 4/4, 6/8 (seventh), songs from music textbooks (eighth and ninth).
Singing	(1) Song selections (seventh to ninth): a. Corresponding to music theory. b. Corresponding to other academic subject areas. c. Corresponding to school calendar, holidays, and seasons. f. Memorizing required song selections. g. Choosing supplemental song selections. d. English songs (English text, Chinese translation). e. Appropriate singing range for junior high school students. (2) Musical form: a. 70% of the songs are unison (seventh to ninth, simplified scores are introduced in eighth grade). b. 20% of the songs are two-part chorus (seventh to ninth). c. ten% of the songs are canon (seventh). d. ten% of the songs are three-part chorus (eighth and ninth).

Table 2, (continued)

Content Areas of Music curriculum, a portion of *National Junior High School Curriculum*

Category	Content Areas (Grade Level)
Composition	(1) Making simple rhythmic instruments (seventh). (2) Imitating different sounds of rhythm in every day life (seventh). (3) Creating body sounds such as clapping, stamping, or finger snapping to the rhythm (seventh). (4) Creating speech patterns to the rhythm (seventh). (5) Understanding and using ostinato (seventh). (6) Accompaniment with songs (seventh). (7) Rhythmic ensemble (seventh). (8) Modifying familiar songs (eighth). (9) Composing a 4 to 8 measure-long melody (eighth). (ten) Using the Chinese Pentatonic scale (ninth). (11) Free-style composition (it can be incorporated with Chinese poem lyrics) (ninth).
Instrument	(1) Alto recorder (seventh and eighth). (2) Recorder Ensemble (soprano recorder and alto recorder) (eighth and ninth). (3) Easy melody on the Keyboard (seventh).
Music Appreciation	(1) Introducing vocal, instrumental, solo, and ensemble performances (such as soprano solo and string quartet) (seventh). (2) Recorder family (seventh). (3) Percussion (seventh). (4) Woodwind and Brass (seventh) . (5) Strings (seventh). (6) Chinese folk songs (seventh). (7) Chinese/Taiwanese traditional operas (seventh and ninth). (8) Musical forms (Rondo, Variations, Sonata) (eighth). (9) Ethnic music from other countries (eighth).

Table 2, (continued)

Content Areas of Music curriculum, a portion of National Junior High School Curriculum

Category	Content Areas
Music Appreciation	(10) Western composers from different genres (eighth). (11) Chinese traditional music (ninth). (12) Chinese music of modern era (ninth).

The guidelines had five curriculum goals. The following statements were this researcher's interpretation and translation of the five curriculum goals, based on the guidelines published by the Taiwan MOE (1994, p. 1).

1. Cultivating students' interest in music, and their love for family, hometown, country, and the world;
2. Teaching students fundamental musical knowledge and building their abilities to appreciate music;
3. Encouraging students to participate in music making both in class and in their leisure pursuits;
4. Building their abilities in the areas of self-discipline and cooperation;
5. Preparing students to understand the meaning of life and achieve their full potential through aesthetic experiences.

Implementation.

The guidelines divided the description of curriculum implementation into five parts: textbook compilation, teaching, classroom equipment, relation to other subjects, and student assessment. The guidelines stipulated rules for textbooks compilation, suggesting that book publishers compile two volumes of music textbooks for seventh graders, and one volume each for eighth and ninth graders. The guidelines also suggested the following principles for book publishers in selecting music materials: (1) cover all curricular content areas; (2) select four common songs for students to memorize for eventh grade, and three songs for eighth and ninth grades; (3) use only MOE-endorsed musical terms; (4) use only song-relevant music fundamental exercises; (5) show pictures of good posture for instrumental playing; (6) use music appreciation materials which are familiar and meaningful for students, stylistic and representative to different cultures, and relevant to the common songs selected; (7) use music composition materials which are accessible and applicable to students' lives; (8) use materials corresponding to environments, season changes, and folk customs; (9) select songs with appropriate voice ranges and educational lyrics; (10) English songs are allowed, but learning of Chinese songs should be the priority; and (11) make music recordings and videos available to teachers.

The teaching section included the instruction of ear training, group singing, instrumental playing, music composition, music appreciation, and teaching students with special needs. In teaching ear training, the guidelines suggested that students be able to discriminate between (1) varied intervals, harmonic structure, and timbre within songs included in music textbook; (2) major, minor, and pentatonic scales; and (3) different meters. The guidelines also suggested that instruction of ear training include examples of single notes, melodic phrases, rhythmic practices, intervals, and chords.

In teaching singing, the guidelines suggested that teachers use proper diction, phrasing, dynamics, agility, and vocal register. Teachers should focus on students' understanding of lyrics to ensure expressive singing. In teaching instrumental playing, the guidelines suggested that junior high students learn alto recorder. The review of soprano recorder was secondary. Students should be given opportunities to perform in solo or ensemble settings within the class time. School-wide music competitions were allowed.

In teaching music composition, the guidelines suggested that teachers use activities such as game, body movement, and aural imitation to teach music composing. In teaching music appreciation, the guidelines suggested that teachers supplement instruction with real instrument, proper music instrument illustrations, and well-performed videos. In teaching students with special needs, the guidelines suggested that teachers assign high-achieving students to mentor

low-achieving students. Teachers might substitute instrumental playing and music appreciation for group singing for those who rejected singing due to changing voices.

The guidelines suggested four ways to relate music to the learning of other subjects: (1) selecting songs with materials learned from subjects of Chinese, English, scouts, and health education; (2) listening to multicultural music from other countries studied in social studies classes; (3) drawing pictures of music instruments and music heard; and (4) making musical instruments.

For classroom equipment, the guidelines suggested that there be at least one music room in every school. The music room should be sound-proof and air-conditioned. The guidelines also suggested a list of equipment for the music room: a large music staff board, keyboard display cardboard, music flash cards, chairs, desks, piano, digital piano, sound system, television, VCR, DVD player, computer, music stands, instrument/manuscript storage, karaoke, baton, and a portable self-rising stage. The guidelines also suggested that students have their own alto recorders. The schools should manage an annual budget for restocking the following instruments and equipment: (1) percussion: concert bass, concert tom-tom, snare drum, finger cymbal, crash cymbal, slapstick, triangle, tambourine, temple blocks, (2) melodic instruments: xylophone, glockenspiel, accordion, harmonica, guitar, soprano recorder, alto recorder, tenor recorder, bass recorder, great bass recorder, nan-hu (南胡), san-hsiena (三弦), da-juan (大阮), tsu-di (曲笛),

ban-di (梆笛), violin, viola, cello, double bass, trumpet, trombone, horn, clarinet, oboe, bassoon, saxophone, (3) Chinese percussion, and (4) music magazines, music books, tapes, CDs, and related music illustrations.

The guidelines suggested that student assessment cover music knowledge, music skills, and learning attitudes. The evaluation of students' music knowledge contributed to 25 percent of the total score. Teachers might select one or more of the following assessments: (1) final written exam, (2) oral tests, (3) field notes, (4) field trip report, or (5) theory homework. The evaluation of students' music skills contributed to 50 percent of the total score. In addition to group singing and recorder playing, students might also be tested in: (1) sight-singing, (2) dictation, or (3) other instrumental playing. The evaluation of students' learning attitudes contributed to 25 percent of the total score. The base score was 80 points. The maximum score was ten0 points. The guidelines also suggested that the teachers might add or deduct two to five points from the base score based on students' performance in the following categories: (1) learning attitude, (2) being able to appreciate music, (3) creativity, and (4) making percussion instruments.

Comparison of the Two Curricula

Scope and content.

The previous music curriculum listed music theory, music fundamentals, vocal singing, instrumental playing, composition, and music appreciation as the six musical content areas that

students should learn sequentially and master well. For example, in learning tonality specified in the guidelines (Taiwan MOE, 1994), the seventh graders would start with C, F, and G majors, proceed to the minors in the eighth grade, and then arrived at triads and cadences in the ninth grade. In the area of music appreciation specified in the guidelines (Taiwan MOE, 1994), the seventh graders would begin with instrumental families and then continue with musical forms in the eighth grade.

In contrast, in the Arts and Humanities curriculum, the sequence and content of musical skills and knowledge were omitted purposefully. Instead, it focused on three goals: exploration and expression of the arts, understanding of the arts, and application of the arts. Eleven competency indicators for learning the arts replaced the scope and sequence of music skills and knowledge. The scope of learning in the Arts and Humanities curriculum expanded to cover music as well as visual arts and performing arts; the new curriculum encouraged the practical application of knowledge of arts into everyday life. For example, the second competency indicator required students' artworks to reflect societal concerns and environmental issues; it allowed students to connect what they learned in the classroom to their everyday lives. Moreover, the eighth Competency Indicator required students to research chosen topics using the internet. Learning the arts was no longer confined to the classroom. These two curricula emphasized two different viewpoints on arts education.

Implementation.

The students were allocated less time in music instruction by the Arts and Humanities curriculum than in the previous National Music Curriculum. The National Music Curriculum (Taiwan MOE, 1994) required seventh graders to take two 50-minute music classes per week, and eighth and ninth graders to take one 50-minute music class per week. The Arts and Humanities curriculum (Taiwan MOE, 2004) reduced weekly music instruction time from 100 minutes to 45 minutes for the seventh graders, and from 50 minutes to 45 minutes for the eighth and ninth graders.

Methods of student assessment were different between two curricula. Student assessment suggested in the National Music Curriculum was based on (1) how well students played recorders and sang songs, which accounted for 50% of the total score; (2) how well they read music scores, which accounted for 25% of the total score; and (3) their learning attitude, which accounted for the remaining 25%. Instead of specifying the percentages in any evaluation category, the Arts and Humanities curriculum suggested that multiple evaluation tools be used in student assessment. The evaluation tools included (1) observations, (2) individual conferences, (3) paper-and-pencil tests, (4) student journals, (5) student self-evaluation, (6) checklists, (7) classroom discussion, and (8) student portfolios. The new curriculum recommended that both the quantity and quality of the student's learning should be evaluated.

Explanations of Terms

Competency indicators [能力指標].

Competency indicators were synonymous with content standards, a term which was used most frequently in state curriculum guidelines in the United States. Specified in the National Nine-Year Integrated Curriculum (Taiwan MOE, 2004), competency indicators described what students should be capable of doing at grades 2, 4, 6, and 9. Competency indicators were made to correspond with the attainment of the ten core competencies specified in the National Nine-Year Integrated Curriculum.

Core competencies [基本能力].

The core competencies were the expected learning outcomes that students achieved after receiving instruction based on the National Nine-Year Integrated Curriculum (Taiwan MOE, 2004). Ten core competencies were specified in the National Nine-Year Integrated Curriculum. These core competencies corresponded with the ten curriculum goals specified in the National Nine-Year Integrated Curriculum. The Taiwan MOE was determined to ensure that students possessed these ten Core Competencies by the end of their education. The National Nine-Year Integrated Curriculum (2003, p.1) stated that "the school system must produce outstanding citizens capable of patriotism and the ability to adopt a global perspective by following the new

curriculum." The following ten core competencies were directly quoted from the official English translation made by the Taiwan MOE (2004, pp.5-6).

1. Self-understanding and exploration of potential, which involved (1) being able to know one's own physical condition, capabilities, emotions, needs, and personality; (2) being able to love and care for oneself; (3) being able to self-reflect regularly; (4) self-discipline; (5) having optimistic attitudes and morality; and (6) being able to show one's individuality, explore one's potentials, and establish a good personal perspective;
2. Appreciation, representation, and creativity, which involved (1) being able to perceive and appreciate beauty, as well as to exert imagination and creativity; (2) being able to show a positive and innovative attitude; and (3) being able to express oneself;
3. Career planning and lifelong learning, which involved (1) being able to integrate social resources with the potential to bring one's talents into full play; (2) being able to set personal goals; (3) being adaptive to social change; and (4) being able to aim at lifelong learning;
4. Expression, communication, and sharing, which involved (1) being able to utilize all kinds of symbols effectively (such as languages in both spoken and written

forms, sounds, motions, pictures, and arts) and tools (such as media and technology); (2) being able to express personal thoughts, philosophy, and emotions; (3) being able to listen attentively and effectively communicate with others; and (4) being able to share various perspectives and information with others;

5. Respect, care, and team work, which involved (1) being literate within a democratic society; (2) being able to tolerant different opinions; (3) being able to treat each individual and group equitably; (4) being able to respect life, as well as care for the community, the environment, and nature; (5) being able to obey government laws and community rules, and (6) being able to cooperate with teammates;

6. Cultural learning and international understanding, which involved (1) being able to appreciate and respect different ethnic groups and cultures; (2) being able to understand the histories and cultures of all nations; (3) being able to recognize the trends of globalization (in which countries all over the world are integrated into a global village); and (4) being able to develop a global perspective (with mutual dependence, trust, and cooperation);

7. Planning, organizing, and putting plans into practice, which involved (1) being able to make plans and put ideas into practice in daily life; and (2) being able to adopt various approaches (by which thoughts and practice are complementary and each member can contribute to the community);

8. Utilization of information technology, which involved (1) being able to use technology in a correct, safe and effective way; (2) being able to use good judgment; and (3) being able to enhance learning and to improve living quality;

9. Active exploration and study, which involved (1) being curious and observant; (2) being able to actively explore and discover; and (3) being able to apply knowledge and skills in daily life;

10. Independent critical thinking and problem solving, which involved (1) being able to think and reflect; (2) being able to make judgments; and (3) being able to solve problems and conflicts effectively.

Curriculum goals of the National Nine-Year Integrated Curriculum [九年一貫課程的課程目標].

The National Nine-Year Integrated Curriculum had ten curriculum goals. The Taiwan MOE (2004) stated,

> The aim of education is to teach students basic knowledge, develop the capacity for lifelong learning, and help them become outstanding citizens … the schools will achieve such ideals through instruction which emphasizes humanity, democracy, national awareness, global perspective, and patriotism" (p. 1).

The Taiwan MOE was determined to guide students in becoming outstanding citizens through instruction, emphasizing the ten curriculum goals. The following ten curriculum goals were directly quoted from government publication and translated into English by the researcher of this study:

> (1) To enhance self-understanding and explore individual potential; (2) To develop abilities to create, to appreciate beauty, and to present one's own talents; (3) To promote abilities related to career planning and lifelong learning; (4) To cultivate knowledge and skills related to expression, communication, and sharing; (5) To learn to respect others, care for the community, and facilitate teamwork; (6) To further cultural learning and global perspectives; (7) To strengthen knowledge and skills related to planning,

organizing, and implementation; (8) To acquire the ability to use technology and information obtained; (9) To encourage the attitude of active learning and researching; and (10) To develop abilities related to independent thinking and problem solving. (Taiwan MOE, 2004, pp.3-4)

Instructional goals in 7 learning areas of the National Nine-Year Integrated Curriculum [九年一貫課程中七個學習領域的教學目標].

Each of the seven learning areas has its own instructional goals that are especially established for attainment of ten Core Competencies. The numbers of instructional goals for 7 learning areas are varied. For example, there are three instructional goals for the Arts and Humanities curriculum, three goals for the Math curriculum, and ten goals for the Language arts curriculum.

Multi-route promotion program for entering senior high schools and vocational high schools [高中職多元入學制度].

Prior to 2001, junior high graduates were admitted to senior high schools based on their scores on the annual regional Joint Senior High Schools Entrance Exams. Starting in 2001, junior high graduates who desired to further their education had three alternatives: special talent auditions [甄選入學],Local school admissions [申請入學], and joint school admissions [登記分發]. All three alternatives are based on the students' scores on the Basic Achievement Test for

Junior High Students (BATs) [國民中學基本學力測驗], which are nationwide achievement tests offered twice a year. The BATs test the students' knowledge in Chinese, English, math, science, and social studies. Every year the first BATs are administered in late May. With the May BATs scores, students can apply for special talent auditions and local school admissions. Students who fail the first two admission alternatives can retake the BATs in July and apply for joint school admissions using the higher of their two BATs scores. For special talent auditions, in addition to BATs scores, the students are screened based on their performance in language, science, math, arts, music, or sports. For local school admissions, the students' GPA and a differential weighing on some subjects of BATs are reviewed by individual school admissions committees. For joint school admissions, the students apply for admission using their BATs scores. Students can employ all three alternatives. However, once the student accepts admission from one school, he/she is not allowed to use other alternatives. Compared to the advancement system before 2001, in which the students only had one chance a year to take the regional Joint Senior High School Entrance Exams, this new system would provide more opportunities for the students to advance to the next education level and relieve them from the pressures of having to perform their best on one exam.

Regional joint senior high school entrance exams [高中聯考].

Prior to 2001, annual Regional Joint Senior High School Entrance Exams were given to the students to screen them for the next level of education. The northern, central, southern, and eastern regions of Taiwan had separate exams on the same days in July. Exam questions were made by a committee composed of highly regarded college professors. All senior high schools were ranked based on the rate of their graduates admitted to the best universities. The exams lasted for two days and tested students' proficiency in Chinese, English, math, history, geography, biology, earth science, physics, and chemistry. Students were admitted to senior high schools based on their test scores.

Curriculum Summary

The Arts and Humanities Curriculum and the National Music Curriculum were described and compared. Topics included the history, the scope and content, and the implementation guidelines. The old curriculum emphasized that students should learn musical contents areas sequentially and master them well. In contrast, the new curriculum encouraged the practical application of knowledge of the arts into everyday life. Instructional time set aside for learning music was decreased in the new curriculum. The new curriculum suggested multiple evaluation tools to be used in student assessment, the old curriculum specified the percentages accounted for students' learning outcomes in playing instrument, music reading, and learning attitudes.

CHAPTER 3

METHODOLOGY

Introduction

It was the purpose of this study to investigate teachers' attitudes toward following the Arts and Humanities Curriculum and to determine the relationship of teachers' attitudes to four selected curriculum integration factors. These curriculum integration factors included, (1) The quantity of content areas taught in music class, (2) Teachers' satisfaction of their students' learning outcomes, (3) Teachers' confidence in planning lessons, and (4) The number of years spent in curriculum integration. In this chapter, the methodology used to investigate music teachers' attitudes toward following the Arts and Humanities Curriculum is described. The purpose of this chapter is to delineate how subjects were selected, how the questionnaire was developed, and how data were collected and analyzed. This chapter is divided into five sections: (a) Population and sample, (b) Instrument development, (c) Reliability and validity of the questionnaire, (d) Data collection procedures, and (e) Data analysis.

Population and Sample

The population of this study included general music teachers who taught in Taiwan junior high schools during the fall semester of 2005. Based on the official educational statistics reports, Demographics of Junior High School and Demographics of High School (Taiwan MOE, 2005),

Taiwan had 734 public junior high schools, and 180 junior high divisions of public and private high schools in the fall of 2005. The total number of junior high schools was 914. The information concerning school sizes and addresses was obtained from the government's website (Taiwan MOE, 2005).

The random table used for selecting schools was obtained from the website address http://www.random.org. Alreck and Settle (2003) stated that "The best sample size is a well-mixed group with 10% of the population, and less than 1,000 subjects" (pp. 62-63). This researcher selected a total of 96 schools, with 24 schools (25%) coming from each of the four geographical regions. These four geographical regions were northern Taiwan, central Taiwan, southern Taiwan, and eastern and remote islands of Taiwan.

The goal was to obtain equivalent numbers of teachers from schools representing different school sizes. Because smaller schools usually had fewer teachers than the larger ones, a ratio of 3:2:1 was set for selecting schools from three school sizes: small schools, with 12 or fewer classes; medium schools, with 13 to 36 classes; and large schools, with 37 or more classes. As a result, 12 small schools (50%), eigh8t medium schools (33%), and 4 large schools (17%) were chosen as the 24 schools representing a geographical region. The breakdown numbers of schools selected can be found in Figure 3.

Figure 3

Sample: Numbers of School (N = 85) Organized by (1) Whether the New Curriculum Had /Had Not Been Pilot Tested, (2) Region, and (3) School Size

Pilot / Non-pilot	1-12 classes	13-36 classes	37 + classes	Total
North	1 / 11	4 / 4	2 / 2	7 / 17
Central	5 / 7	4 / 4	2 / 2	11 / 13
South	6 / 6	4 / 4	2 / 2	12 / 12
East and islands	6 / 6	4 / 4	2 / 2	12 / 12
Total	18 / 30	16 / 16	8 / 8	42 / 54

Only 99 junior high schools had pilot tested the new curriculum since 1999, while the majority of Taiwan junior high schools had still retained the old curriculum and only recently implemented the new curriculum. To include an equivalent number of schools representing both pilot-tested and non-pilot-tested groups, the pilot-tested schools were chosen before the non-pilot schools. For example, a total of 12 small schools was needed from central Taiwan, with

equivalent groups of pilot and non-pilot schools. There were only five small schools that had pilot implemented the new curriculum in central Taiwan. Therefore, the researcher chose all of the five small pilot-tested schools, and then randomly selected the other seven small schools from a pool of central region small schools which had not pilot-tested the new curriculum. If there was a sufficient number of pilot-tested schools that could be chosen from, the researcher randomly selected the needed number of schools without taking all pilot-tested schools. As a result, 42 pilot-tested schools (44%) and 54 non-pilot-tested schools (56%) were chosen.

Schools

The number of schools sampled was 96, with 24 schools representing each of the four geographical regions. Among the 96 selected schools, there were 42 schools (44%) in which the Arts and Humanities Curriculum had been pilot-tested since 1999, and 54 schools (56%) which had retained the National Music Curriculum and had only recently implemented the Arts and Humanities Curriculum. Of the 96 sampled schools, this researcher set the ratio at 3:2:1 for selecting schools of three school sizes: 48 schools with fewer than 12 classes, 32 schools with 13 to 36 classes, and 16 schools with 37 or more classes.

Six weeks after the first mailing, a low return rate for small-sized schools was noted; therefore, telephone calls were made to verify the accuracy of the number of music teachers hired in the schools that had failed to return the questionnaires. Among the 48 small-sized

schools surveyed, 11 schools did not hire music teachers, and one school was re-classified as a medium-sized school. The number of schools sampled was decreased from 96 to 85. Among these 85 schools, 63 schools responded to the questionnaires, yielding a school response rate of 74%. The researcher conducted informal interviews with four teachers from non-responding schools. Their answers tended to fall in the middle range, which were similar responses as the other pilot responses.

Among these 63 schools, there were 27 schools (43%) in which the Arts and Humanities Curriculum had been pilot-tested since 1999, and 36 schools (57%) had retained the National Music Curriculum and had only recently implemented the Arts and Humanities Curriculum. Sixty-four percent of the sampled schools that had pilot tested the new curriculum completed the questionnaires, and 66% of the sampled schools that had recently started using the new curriculum completed the questionnaires.

Among the 63 schools, there were 28 schools (45%) with equal to or less than 12 classes, 22 schools (35%) with 13 to 36 classes, and 13 schools (20%) with 37 classes or more. Fifty-eight percent of the sampled small schools returned the questionnaire, 68% of the sampled medium schools returned the completed questionnaire, and 81% of the sampled large schools returned the questionnaire.

Among the 63 schools, there were 13 schools (21%) from northern Taiwan, 16 schools (25%) from central Taiwan, 20 schools (32%) from southern Taiwan, and 14 schools (22%) from eastern Taiwan. Fifty-four percent of the sampled northern schools, 66% of the sampled central schools, 83% of the sampled southern schools, and 58% of the sampled eastern schools returned the questionnaire. The break-down of the numbers of schools that returned the questionnaire can be found in Figure 4.

Figure 4

Returned Questionnaires: Numbers of Schools (N = 63) Organized by (1) Whether the New Curriculum Had/Had Not Been Pilot Tested, (2) Region, and (3) School Size

Pilot / Non-pilot	1-12 classes	13-36 classes	37 + classes	Total
North	1 / 5	2 / 1	2 / 2	5 / 8
Central	2 / 4	3 / 4	2 / 1	7 / 9
South	4 / 5	3 / 4	2 / 2	9 / 11
East and islands	3 / 4	3 / 2	0 / 2	6 / 8
Total	10 / 18	11 / 11	6 / 7	27 / 36

Respondents

From the 63 responding schools, 92 questionnaires were collected. Among the 92 respondents, there were 38 teachers (41%) from schools that had pilot tested the Arts and Humanities Curriculum since 1999, and 54 teachers (59%) from schools that had retained the National Music Curriculum and had only recently implemented the Arts and Humanities Curriculum. There were 28 teachers (30%) from small schools, 28 teachers (30%) from medium schools, and 36 teachers (40%) from large schools. Moreover, 20 teachers (22%) were from northern Taiwan, 21 teachers (23%) were from central Taiwan, 36 teachers (39%) were from southern Taiwan, and 15 teachers (16%) were from eastern Taiwan. With the help of the researcher's college peers who taught in southern Taiwan, this researcher was able to collect more data from southern Taiwan. The details on numbers of music teachers can be found in Figure 5. There were 13 additional returned questionnaires collected by the researcher's peers, who taught music at Taipei municipal junior high schools. These schools were not in the sample selected. Therefore, to ensure sampling accuracy, these 13 responses were excluded from the data analysis. However, their open-ended responses were noted.

Figure 5

Returned Questionnaires: Number of Music Teachers (N = 92) Organized by (1) Whether the New Curriculum Had/Had Not Been Pilot Tested, (2) Region, and (3) School Size

Pilot / Non-pilot	1-12 classes	13-36 classes	37 + classes	Total
North	1 / 5	2 / 1	3 / 8 (+13*)	6 / 14
Central	2 / 4	3 / 7	3 / 2	8 / 13
South	4 / 5	3 / 6	10 / 8	17 / 19
East and islands	3 / 4	4 / 2	0 / 2	7 / 8
Total	10 / 18	12 / 16	16 / 20 (+13*)	38 / 54 (+13*)

*Additional 13 responses from 8 large Taipei Junior High Schools were collected. These responses were excluded from the data analysis, but their answers on open-ended questions were noted.

Demographic Information

Table 3 summarizes the distribution of music teachers according to age, educational level, gender, years of teaching experience, and their knowledge of Competency Indicators described in the Arts and Humanities Curriculum. The majority of the music teachers were female (88%). Nearly 80% of the respondents were under 40 years old, and 32% of the respondents had a master's degree. Nearly 90% of the respondents indicated that they had knowledge of the Competency Indicators; however, this number did not show the depth of their knowledge or the assurance of their ability to apply this knowledge to lesson planning and student assessment.

Curriculum Integration Experience

Table 4 summarizes the respondents' experiences in curriculum integration. The nationwide implementation of the Arts and Humanities Curriculum started in the fall of 2001. Therefore, all music teachers were mandated to follow the Arts and Humanities Curriculum at the time of this study. The results showed that the majority of teachers had at least three years of experience in curriculum integration. The results also showed that 75% of the respondents had integrated music with arts-related disciplines, and 63% of the respondents had integrated music across disciplines. Regarding the common planning time attendance, only one respondent replied that he/she did not attend the scheduled common planning time. Nearly 80% of the respondents had regular common planning time with their colleagues.

Table 3

Demographic Characteristics of Music Teachers (N = 92)

Characteristic	*n*	%
Age		
Less 30	28	30%
30-39	46	50%
40-49	17	18%
50-59	1	1%
Highest education level completed		
High school	2	2%
Bachelor	59	64%
Master's	30	32%
No response	1	1%
Gender		
Female	81	88%
Male	11	11%
Years of teaching		
0-5	35	38%
6-10	25	27%
11-15	21	22%
16-20	3	3%
21 and more	7	7%
No response	1	1%
Knowledge of *Competency Indicators*		
Yes	83	90%
No	5	5%
No response	4	4%

Table 4

Curriculum Integration Experience of Music Teachers (N = 92)

Question	*n*	%
Year of curriculum integration		
0	3	3%
1	11	11%
2	10	10%
3	31	33%
4	14	15%
5 and more	21	22%
No response	2	2%
Integration across non-arts disciplines		
Yes	58	63%
No	33	35%
No response	1	1%
Integration within visual arts, theater, and music		
Yes	69	75%
No	22	23%
No response	1	1%
Attendance of Common planning time		
It's not scheduled	15	16%
It's scheduled and I attend	74	80%
It's scheduled but I don't attend	1	1%
No response	2	2%

Instrument Development

Questionnaire Used in the Main Study

The questionnaire contained nine questions. The average time for completing the questionnaire was approximately 20 minutes. For the readers of this dissertation, the English translation of the questionnaire and the cover letter can be found in Appendix B. The English

translation was reviewed and validated by a professional who held a master's degree in Theology and was able to speak, read, and write both English and Chinese fluently. The respondents received the questionnaire written in Chinese only.

Question 1 asked teachers' attitudes toward following the Arts and Humanities Curriculum, with six statements designed for this purpose. These statements were constructed based on the premise made by Rosenberg and Hovland (1960).

> The types of response that are commonly used as indices of attitudes fall into three major categories: cognitive, affective, and behavioral … Cognitive responses might be inferred from verbal statement of what he believed … the affective responses might be inferred from verbal statements of how much he liked or disliked … and the behavioral responses might be inferred from what he said he would do in the given situation (pp. 1-4).

The first three statements, which were directly quoted from the Guidelines of the Arts and Humanities Curriculum, described the benefits of implementing the Arts and Humanities Curriculum. Statements 1, 2, and 3 were constructed to test what a teacher believed. The other three statements described what a teacher would do (statement 4) and how much a teacher liked or disliked the Arts and Humanities Curriculum (statements 5 and 6). The six statements are described as follows:

1. The Arts and Humanities Curriculum can give students a broad and comprehensive arts education.
2. The Arts and Humanities Curriculum can efficiently promote students' learning in fine arts.
3. Music teaching should be free from a performance-oriented and elite arts educational philosophy.
4. I will completely follow the Arts and Humanities Curriculum.
5. I like the way music is taught after the Arts and Humanities Curriculum is implemented.
6. I prefer the Arts and Humanities Curriculum over the old National Music Curriculum.

Each statement was provided with a 6-point rating scale ranging from 1 (strongly disagree) to 6 (strongly agree) and an additional option for "undecided," which was treated as a missing value. This researcher considered that an even number of response categories might promote clearer decisions, forcing a respondent to commit to the direction he/she preferred. Furthermore, according to de Vaus (1990), the inclusion of the "I don't know" or "no opinion" categories might provide a viable option for respondents who had no opinion regarding a particular question, and prevented the respondents from being forced to create pretend opinions.

Question 2 had nine sub-questions, with three questions asking teacher experience in curriculum integration, one question asking school size, one question asking teachers' knowledge of the Competency Indicators, and four questions asking the regularity and discussion topics for the common team planning time.

Question 3 asked the level of frequency for the 12 selected musical content areas to be taught in class. These 12 musical content areas were selected from the old National Music Curriculum. A 6-point rating scale was given, ranging from 1 (never) to 6 (always), with an additional option for "undecided." Question 4 was an open-ended question asking additional musical content areas taught in class that were not listed in question 3.

Question 5 asked the level of teachers' satisfaction of their students' learning outcomes in the 20 selected musical content areas. The 20 content areas were a combination of the 12 musical content areas covered in the old National Music Curriculum and eight statements taken from the 11 Competency Indicators specified in the Arts and Humanities Curriculum (2004). A 6-point rating scale was used, ranging from 1 (very terrible) to 6 (excellent), with an additional option for "undecided."

Question 6 asked the level of teacher's confidence in planning lessons for the 20 selected content areas. A 6-point rating scale was provided, ranging from 1 (definitely not) to 6 (definitely), with an additional option for "undecided." Question 7 and 8 asked respondents to

prioritize three content areas they considered to be the most important, and three content areas they considered to be the least important, from the 20 selected content areas.

Question 9 was a checklist question of the 12 implementation obstacles that music teachers might experience in curriculum integration. These 12 implementation obstacles addressed the difficulties and issues in curriculum integration found in studies conducted by Dougherty (1999), Floyd-Levin (1995), Gaskins (1994), Goode (1998), Hsieh (2001), Huang (2000), Miller (1995), Schumacher (1992), Stewart (1997), Tipton (1997), and Whitaker (1996). At the end of the questionnaire, information concerning gender, age, educational level, and years of teaching experience was sought.

The First Preliminary Questionnaire

The questionnaire underwent two revisions prior to being used in the main study. The first preliminary questionnaire was mailed to a full-time general music teacher who taught music in one of the Taipei municipal high schools for 12 years. This music teacher collected 11 responses from a convenience group of junior high school music teachers in Taipei city.

The first preliminary questionnaire contained 28 questions. Before the 28 questions on the questionnaire, 14 additional demographic questions asked school demographics (questions A, B, and C), teaching experiences (questions D and E), teaching load (question F, G, and H), team teaching activities (questions I and J), gender (question K), teacher's age (question L),

educational levels (question M), and college major (question N). Following these demographic questions, the first 26 questions on the questionnaire asked teachers' attitudes on (1) the teaching of the 12 musical content areas (questions 1 through 5) selected from the old National Music Curriculum, (2) the teaching of the 17 Competency Indicators (questions 6 through 14) specified in the Provisional Arts and Humanities Curriculum, and (3) experiences concerning the 12 implementation obstacles (questions 15 through 26). Questions 1 through 26 were answered with a 5-point rating scale, ranging from 1 (strongly disagree) to 5 (strongly agree), with a middle "neutral" option. A description of questions 6 through 14 and their relationships to the Competency Indicators can be found in Appendix A.

For questions 1 through 14 of the 28 questionnaire questions, each question contained 15 attitudinal statements. For questions 15 through 26, each question contained one attitudinal statement. The respondents were asked to rate each statement using a 5-point rating scale. Questions 27 and 28 were checklists asking respondents to prioritize three musical content areas they considered to be the most important, and three content areas they considered to be the least important. Questions 27 and 28 of the first preliminary questionnaire were identical to questions 7 and 8 of the questionnaire used in the main study. The 15 attitudinal statements used in questions 1 through 14 were constructed according to Rosenberg and Hovland's (1960) three-component model of attitudes. The researcher wrote two paired statements for affective

responses, four pairs for cognitive responses, and one pair for behavioral responses. Each pair included both positive and negative statements. The description of attitudinal statements and their relationships to Rosenberg and Hovland's (1960) three attitudinal responses can be found in Appendix C. The original plan was to select seven statements from the seven paired statements. The researcher adopted Norusis' (2003a, 2003b) premise that a better statement might be chosen by monitoring a change in the Cronbach's (1951) alpha value after one statement was deleted from the scale. If the elimination of one statement increased its Cronbach's (1951) alpha value, then that statement would be deleted. Two alpha values for each pair were calculated when either a positive or a negative statement was deleted. If both alpha values were equal, the positive statement was retained. By examining the Pearson Product Moment correlation coefficient, which provided evidence of the degree of consistency between the paired statements, the results showed that the two statements of pair five, Teacher training, did not show a sufficient degree of consistency. Therefore, the researcher separated pair five into two individual statements. In addition to the seven pairs of attitudinal statements, an additional statement concerning teachers' satisfaction of student achievement was included. A copy of the first preliminary questionnaire can be found in Appendix E.

After the first preliminary questionnaire was completed, the researcher learned that the Taiwan MOE had revised the Arts and Humanities Curriculum (2003), and the revised

curriculum guideline was officially announced in June of 2004. The old 17 Competency Indicators were rearranged, and the number of Competency Indicators was decreased to 11, however, the Competency Indicators used for constructing the first preliminary questionnaire were still covered after curriculum revision. Therefore, it was decided not to change the Competency Indicators questions of the first preliminary questionnaire. A description of the Competency Indicators before and after curriculum versions can be found in Appendix A.

The results of the first preliminary questionnaire showed a response pattern in which some music teachers selected the same response categories for all 15 attitudinal statements regardless of various attitudinal components these statements were designed to measure. There were two possible reasons that might explain the observed response pattern: (1) the respondents might have become impatient when they had to answer the same 15 attitudinal statements for 26 questions; and/or (2) the 15 attitudinal statements were not well-written. Therefore, the second preliminary questionnaire was made.

The Second Preliminary Questionnaire

The second preliminary questionnaire contained seven questions. The schools were closed for the 2-month-long summer vacation. The music teacher who distributed the second preliminary questionnaires was not able to contact all 11 respondents who had completed the first preliminary questionnaire. Only eight music teachers were able to complete the second

preliminary questionnaire. Three new teachers were added to this revision process. A copy of the second preliminary questionnaire can be found in Appendix F.

Several changes were made to the second preliminary questionnaire. First, the first 14 questions of the 28 questions on the first preliminary questionnaire were replaced with four new questions which better addressed the research goals incorporated through the problems noted in the first preliminary questionnaire revision. By doing this, the 15 attitudinal statements attached to the first 14 questions of the first preliminary questionnaire were deleted. The four new questions were derived from previous research findings related to teachers' attitudes toward curriculum integration: (1) The quantity of content areas covered; (2) Teachers' satisfaction of their students' learning outcomes; (3) Teacher value of the new curriculum; and (4) Teacher's confidence in planning lessons. The four new questions are:

1. How thoroughly do you teach the following musical content areas in the Arts and Humanities Curriculum?
2. To what extent are you satisfied with your students' performance in the following content areas?
3. Are the following content areas appropriate for today's classroom?
4. How well do you perceive yourself as being capable of developing curriculum to include the following content areas?

Second, the respondents were asked to rate each content area using a 5-point rating scale with a middle "neutral" point and an additional option for "I can't decide." The "I can't decide" option was treated as a missing value. The labeling of rating scales included: (1) "not at all" to "always" for question 1; (2) "very dissatisfactory" to "very satisfactory" for question 2; (3) "absolutely not" to "absolutely" for question 3; and (4) "totally disagree" to "totally agree" for question 4.

Other changes included: (1) Questions 27 and 28 of the first preliminary questionnaire were moved to questions 5 and 6 of the second preliminary questionnaire; and (2) Questions 15 to 26 of the first preliminary questionnaire were converted to question 7 of the second preliminary questionnaire, which later became question 9 of the questionnaire used in the main study.

Several changes were made in the revision of the second preliminary questionnaire, and later the revised second preliminary questionnaire became the questionnaire used for the main study. First, the 5-point rating scale was changed to a 6-point scale, with an additional option for "undecided" which was treated as a missing value. The middle neutral point in the 5-point rating scale, which was used in the second preliminary questionnaire, was taken out. It was possible that those who had selected the "neutral" point might not have neutral opinions, but possibly did not understand the questions, had no experience with the topic of concern, or did not want to

respond to the question. To avoid including those inaccurate answers, an option of "undecided" was added for use in the main study. Second, six statements investigating teachers' attitudes toward following the Arts and Humanities Curriculum were added as question 1 of the questionnaire to be used in the main study. Third, question 3 of the second preliminary questionnaire was deleted.

Other changes included, (1) Sample questions and answers were deleted for use in the main study because some respondents commented that these sample questions were misleading; (2) Questions regarding personal information, such as age, gender, educational level, and years of teaching experience were moved to the end of the questionnaire to avoid offending some respondents, thus to increase the return rate; (3) Questions asking teacher knowledge of the Competency Indicators and their common planning time agenda were added, and (4) An open-ended question asking additional content areas taught in the class was added as question 4.

Validity and Reliability of the Questionnaire

Validity

Content validity was sought for the questionnaire. Content validity is based on the extent to which a measurement reflects the specific domains of content (Carmines & Zeller, 1976). The questionnaire underwent two content validity checks prior to being used in the main study. The first content validity check was performed before revising the first preliminary questionnaire; the

second content validity check was executed before revising the second preliminary questionnaire.

In the first content validity check, the researcher invited two judges, but one of them moved during the study; this change complicated the communication between that judge and the researcher. Eventually, this judge failed to return the judge form. The remaining judge completed the judge form and agreed that the content areas sufficiently represented the content areas covered by the National Music Curriculum and the Arts and Humanities Curriculum. No additional corrections were made. This judge taught in the Taiwan public schools for 15 years, and held a master's degree in special education. This judge was chosen because of his familiarity with the Taiwan educational environment in addition to his knowledge of educational research methods.

A panel of three judges was invited for the second content validity check. The panel of judges was chosen because they were former general music teachers in Taiwan schools, and they also had used the Arts and Humanities Curriculum for at least one year. One judge had a master's degree in music education, and the other two were working toward master's degrees in music performance. A copy of the judge forms and a list of judges' suggestions can be found in Appendix G.

The judges were asked to rate each question on its essentiality to teachers' attitudes studied, on a scale of 1 (not essential and need to eliminate) to 4 (essential and no need to revise). This panel agreed that all questions were essential to the topic studied. In addition, they were asked to determine how well the 20 selected content areas sampled the curricular content of the old National Music Curriculum and the National Nine-Year Integrated Curriculum, indicated by percentages. The average percentage for the content coverage was 77% for question 3 (12 musical content areas selected from the old National Music Curriculum), and 87% for questions 5 and 6 (20 content areas selected from the National Music Curriculum and the Arts and Humanities Curriculum). Questions 3, 5, and 6 were the only questions attached with content areas, therefore needing judges' evaluations of content coverage.

One judge suggested that sight-singing should be separated from sight-reading; another judge recommended two kinds of singing-by-ear: (1) singing to match a tune played at the piano, or (2) singing to match a tune sang by the teacher. In addition to adding sight-singing, this researcher divided ear training into three activities: singing-by-ear, playing-by-ear, and writing-by-ear.

The questionnaire used in the main study had nine questions, with seven of them being examined at the second content validity check. The two questions which were not content validity checked were questions 1 and 4. Question 1 included six statements investigating

teachers' overall attitudes toward following the Arts and Humanities Curriculum. Question 4 was an open-ended question asking additional content areas taught in class that were not asked in question 3. To remove any bias from question 1, the researcher gave these 6 statements, included in question 1, to three music teachers of Taipei municipal junior high schools for reviewing the question's clarity and applicability to the topic studied. The six statements were deemed to be acceptable.

Reliability

Internal consistency was measured for the questionnaire. The reliability respondents were 11 music teachers who completed the first and second preliminary questionnaires. The first preliminary questionnaire had 28 questions. The Cronbach's (1951) alpha values ($N = 11$) ranged from 0.89 to 0.98 before revision and 0.87 to 0.97 after revision, for the scores of the 15 attitudinal statements on questions 1 through 14. The Cronbach's alpha yielded a value of 0.95 for total scores of questions 1 through 14, and 0.62 for total scores of questions 15 through 26. Due to a low alpha value found for questions 15 through 26, this researcher decided to convert questions 15 through 26 into one checklist question to be used as question 7 of the second preliminary questionnaire, and which later became question 9 of the questionnaire used in the main study. Questions 27 and 28, asking the three content areas teachers considered to be the

most important and the three content areas they considered to be the least important, were checklist questions; therefore, no internal consistency was measured.

The second questionnaire had seven questions. The Cronbach's alpha values ($N = 11$) were 0.88 for the 12 content areas of question 1 (quantity of content areas covered in class), 0.92 for the 20 content areas of question 2 (teachers' satisfaction on their students' learning outcomes), 0.76 for the 8 content areas of question 3 (teacher's value on the new curriculum), and 0.93 for the 20 content areas of question 4 (teachers' confidence in planning lessons). Questions 5 through 7 were checklists, and no internal consistency was measured.

Data Collection Procedures

All forms were mailed in a letter-size envelope and handled by the researcher's assistant in Taiwan. This researcher wrote a three digit code on both the back of each questionnaire and the inside of each return envelope, to help the researcher to identify which school had sent back the questionnaires, and to identify the non-responding schools. The first number represented the geographic region where the respondent taught, the second number represented the size of the respondent's school, and the third number represented whether the new curriculum had been pilot tested in the respondent's school. The respondent was asked to keep a signed research consent form for their personal records, and then sent the completed questionnaire back using the return envelope provided. A mail box was rented for the returned correspondences.

The first package was mailed in mid-September of 2005. The cut-off date for the first package was set at six weeks. In the cover letter, the researcher asked respondents to return the questionnaires within two weeks. The researcher used a "re-dropping" procedure at two weeks after the first package had been mailed, and sent a letter to all subjects identifying the questionnaire which had been sent earlier, thanking those who had completed it and urging those who had not done so to mail back the completed form. At the seventh week after the first mailing, the researcher sent the second package to those who had not returned the questionnaire. In the second package, a copy of the questionnaire was included. In the cover letter, the researcher expressed the urgency and impact of non-response to this study. Before mailing the second package, the researcher took procedures to ensure the accuracy of the number of music teachers by calling the administration offices of all non-responding small schools. The small schools with no music teacher were taken off the list; no school was chosen to replace these schools because a sufficient number of responses from small schools had been reached. During the telephone conversation, the researcher asked, "Could I speak to the teacher who teaches music?" While talking with the music teachers, the researcher asked, "I know your schedule is tight. But your school was selected as the most representative school in Taiwan. I would appreciate it if you could complete the questionnaire." The researcher also asked whether they were willing to be interviewed by telephone at their convenience. Those who were willing to be interviewed were

put on a list, which later served as a reference of the non-responses, if they eventually failed to return the questionnaire. In most cases, it was difficult to speak to music teachers on the phone during school hours. When the music teachers of the non-responding schools could not be reached by phone, the researcher's friends in Taiwan, who were teaching in nearby schools, were asked to make direct contacts with these music teachers via their personal connections. For the non-responding schools, the researcher of this study conducted four informal telephone interviews with the teachers who said they were willing to be interviewed at a later time after school hours. The questions asked in the informal interview were similar to the questionnaire, except these four teachers gave one answer for each question, rather than giving 20 separate answers for the 20 musical content areas included in one question. Later, after the researcher of this study completed the data analysis, these four teachers' responses representing non-respondents were compared to the final results. Their answers tended to fall in the middle range, which were very similar responses to the other responses. A cut-off date for the second package was set at one week after Christmas. Among these 85 schools, 63 schools responded to questionnaires, yielding a school response rate of 74%.

Data Analysis

To describe teachers' overall attitudes toward following the Arts and Humanities Curriculum, frequency and percentage of each response category of a 6-point rating scale, and means and standard deviations of scores for the three statements of question 1 were calculated.

To describe the quantity of musical content areas taught in class, frequency and percentage of each response category of a 6-point rating scale, and means and standard deviations of scores for each of the 12 selected musical content areas of question 3 were calculated.

To describe teachers' satisfaction of their students' learning outcomes, frequency and percentage of each response category of a 6-point rating scale, and means and standard deviations of scores for the 20 selected musical content areas of question 4 were calculated.

To describe teacher's confidence in planning lessons, frequency and percentage of each response category of a 6-point rating scale, and means and standard deviations of scores for the 20 selected musical content areas of question 5 were calculated.

To find the three curricular content areas which music teachers considered to be the most important and the least important, a weighted score was given to each content area. The content area which was ranked the highest was given three points for each occurrence, two points for the second rank was given for each occurrence, and one point for the third rank was given for each

occurrence. Afterwards, the 20 selected content areas were ranked from highest to lowest according to the weighted scores they had received.

A list of implementation obstacles was provided for respondents to check all that applied. The frequency of each obstacle was summed and ranked from highest to lowest. An open-ended question supplementing the list followed. Responses to this open-ended question were reported.

To investigate teachers' attitudes toward following the Arts and Humanities Curriculum and the relationship of teachers' attitudes to four selected integration factors, four Pearson Product-Moment Correlation Coefficients were calculated. A mean score for the last three statements of question 1 was calculated and treated as a score representing teachers' overall attitudes toward following the Arts and Humanities Curriculum. Each respondent was given a mean score for the first three integration factors by averaging scores for the 12 selected musical content areas (the first integration factor: quantity of musical content areas taught in class), the 20 selected musical content areas (the second integration factor: teachers' satisfaction of their student learning outcomes), and the 20 selected musical content areas (the third integration factor: teacher confidence in planning lessons). The fourth factor was teacher experience in curriculum integration, which was represented by the number of years of experience which the respondents had provided in question 2 of the questionnaire. A Pearson Product-Moment Correlation Coefficient was calculated between teachers' attitudes toward following the Arts and Humanities

Curriculum and each integration factor. The significance test was performed using a Bonferroni-adjusted alpha level of 0.0125. Scatter diagrams were checked to identify any outliers for the four correlations.

CHAPTER 4

RESULTS

Introduction

The purpose of this study was to investigate teachers' attitudes toward following the Arts and Humanities Curriculum and to determine the relationship of teachers' attitudes to four selected curriculum integration factors. These curriculum integration factors included, (1) The quantity of content areas taught in music class, (2) Teachers' satisfaction of their students' learning outcomes, (3) Teachers' confidence in planning lessons, and (4) The number of years spent in curriculum integration. Following reliability of the questionnaire used in the main study, the results of this study are reported in the order of the research questions guiding this study.

The Reliability of the Questionnaire

The questionnaire used in the main study had nine questions. The Cronbach's alpha analysis ($N = 92$) yielded a value of 0.75 for question 1. Due to the low alpha value found for question 1, the researcher decided to exclude the first three statements of question 1. An alpha coefficient of 0.80 indicated that statements 4 to 6 grouped better. Therefore, only the last three statements were used in the data analysis. Questions 2 (school demographics), question 7 (the three content areas they considered to be the most important), question 8 (the three content areas they considered to be the least important), and question 9 (implementation obstacles) were checklists,

and question 4 (additional content areas taught in class) was an open-ended question. No internal consistency was measured for questions 2, 4, 7, 8, and 9. For the remaining questions, the data analysis ($N = 92$) yielded a Cronbach's alpha value of 0.75 for the 12 selected content areas of question 3 (quantity of content areas taught in class), 0.92 for the 20 selected content areas of question 5 (teachers' satisfaction on their students' learning outcomes), and 0.92 for the 20 selected content areas of question 6 (teacher's confidence in planning lessons). The alpha coefficients showed that the same aspect was tending to be measured in each question, and the questionnaire had acceptable internal consistency.

Table 5 summarizes the Cronbach's (1951) alpha values representing the reliability of the questionnaire used in the main study. Compared to the second questionnaire, all values for the main study decreased slightly. Internal consistency was not sought for questions 2, 7, 8, and 9 because they were checklists, and question 4 was an open-ended question. The results revealed a general consistency between the second questionnaire and the questionnaire used in the main study.

Table 5

The Cronbach's Alpha Values of Reliability of the Questionnaires

	Second Preliminary α	Main Study α
Question 1: Teachers' attitudes toward following the *Art and Humanities* Curriculum		0.80
Question 3: Quantity of musical content areas covered	0.88	0.74
Question 5: Teachers' satisfaction of students' learning outcomes	0.92	0.91
Question 6: Teacher's confidence in planning lessons	0.92	0.92

Research Questions

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? A: Teachers' Attitudes toward Following the Fine Arts Component of the National Taiwan Nine-Year Integrated Curriculum

Question 1 asked music teachers' attitudes toward following the Arts and Humanities Curriculum. The statements included were: (1) I will completely follow the Arts and Humanities Curriculum; (2) I like the way music is taught in class after the Arts and Humanities Curriculum is implemented; and (3) I prefer the Arts and Humanities Curriculum over the National Music Curriculum. Table 6 summarizes the frequencies and percentages of the six response categories, and means and standard deviations for each of the three statements. Besides the six response

categories, the respondents could choose a seventh category of undecided. Undecided responses were treated as missing values and excluded from the data analysis.

The mean score of the overall teachers' attitudes was 3.36 ± 1.07, ranging from 1.33 to 6.00. The highest mean scores was 3.56 ± 1.42 for the statement, I prefer the Arts and Humanities Curriculum over the National Music Curriculum, followed by 3.32 ± 1.26 for the statement: I like the way music is taught in class after the Arts and Humanities Curriculum is implemented, and 3.24 ± 1.12 for the statement, I will completely follow the Arts and Humanities Curriculum. It must be noted that the highest standard deviation was 1.42 (I prefer the new curriculum over the traditional curriculum). Some music teachers stated that they agreed (26%), slightly agreed (20%), or strongly agreed (7%) with this statement, however, other music teachers stated that they disagreed (23%), slightly disagreed (20%), or strongly disagreed (6%).

Table 6

The Frequency, Percentage, Mean, and Standard Deviation of Scores Describing Teachers' Attitudes toward Following the Arts and Humanities Curriculum (N = 92)

Statements	Frequency (%)	Mean	SD	Range
Overall attitudes toward following the Arts and Humanities Curriculum		3.36	1.07	1.33-6.00
I will completely follow the new curriculum		3.24	1.12	
Strongly disagree	1 (1%)			
Disagree	27 (30%)			
Slightly Disagree	27 (30%)			
Slightly Agree	20 (22%)			
Agree	14 (16%)			
Strongly Agree	1 (1%)			
I can't decide	2			
I like the way music was taught with the *Arts and Humanities Curriculum*		3.32	1.26	
Strongly Disagree	7 (8%)			
Disagree	17 (19%)			
Slightly Disagree	28 (31%)			
Slightly Agree	17 (19%)			
Agree	20 (22%)			
Strongly Agree	1 (1%)			
I can't decide	2			
I prefer the *Arts and Humanities Curriculum* over the old *National Music Curriculum*		3.56	1.42	
Strongly Disagree	5 (6%)			
Disagree	20 (23%)			
Slightly Disagree	17 (20%)			
Slightly Agree	16 (19%)			
Agree	22 (26%)			
Strongly agree	6 (7%)			
I can't decide	6			

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? B: The Quantity of Musical Content Areas Taught in Music Class

Question 3 asked the level of frequency of musical content areas taught in class. Besides the six response categories, the respondents could choose a seventh category of undecided. Undecided responses were treated as missing values and excluded from the data analysis. Table 7 summarizes the frequencies and percentages of the six response categories, and means and standard deviations for each of the 12 selected musical areas.

The mean score of the 12 musical content areas was 3.50 ± 1.12, ranging from 2.33 to 5.17. The three lowest mean scores were 2.01 ± 1.39 (writing-by-ear), 2.39 ± 1.53 (playing-by-ear), and 2.59 ± 1.55 (sight-reading). The three highest mean scores were 5.42 ± 0.69 (recorder playing), 5.34 ± 0.58 (music appreciation), and 5.17 ± 0.66 (group singing). It must be noted that the highest standard deviation was 1.65 (singing-by-ear). Some music teachers (53%) stated that they never (24%), very rarely (24%), or rarely (5%) used singing-by-ear activity in class, however, other music teachers stated that they occasionally (20%), very frequently (24%), or always (3%) did.

Table 7

The Frequency, Percentage, Mean, and Standard Deviation of Scores Describing the Quantity of Musical Content Areas Taught in Class (N = 92)

Category	Frequency	Percentage	Mean	SD	Range
All areas			3.50	0.63	2.33 - 5.17
Recorder playing			5.42	0.69	
Rarely	1	1%			
Occasionally	7	8%			
Very frequently	35	39%			
Always	47	52%			
I can't decide	2				
Music appreciation			5.34	0.58	
Occasionally	5	5%			
Very frequently	50	56%			
Always	35	39%			
I can't decide	2				
Group Singing			5.17	0.66	
Very rarely	1	1%			
Occasionally	7	8%			
Very frequently	58	64%			
Always	25	27%			
I can't decide	1				
Music theory			4.23	0.94	
Never	1	1%			
Very rarely	3	3%			
Rarely	12	13%			
Occasionally	37	41%			
Very frequently	34	37%			
Always	4	4%			
I can't decide	1				

Table 7 (continued)

Category	Frequency	Percentage	Mean	SD
Conducting			3.33	1.13
Never	8	9%		
Very rarely	16	18%		
Rarely	9	10%		
Occasionally	50	56%		
Very frequently	6	7%		
I can't decide	3			
Singing by ear			3.06	1.65
Never	21	24%		
Very rarely	21	24%		
Rarely	4	5%		
Occasionally	17	20%		
Very frequently	21	24%		
Always	3	3%		
I can't decide	5			
Composing			3.00	1.28
Never	13	15%		
Very rarely	22	25%		
Rarely	12	14%		
Occasionally	34	38%		
Very frequently	6	7%		
Always	1	1%		
I can't decide	4			
Sight-singing			2.98	1.45
Never	19	22%		
Very rarely	18	20%		
Rarely	15	17%		
Occasionally	18	20%		
Very frequently	18	20%		
I can't decide	4			

Table 7 (continued)

Category	Frequency	Percentage	Mean	SD
Keyboard playing			2.64	1.32
Never	23	27%		
Very rarely	21	25%		
Rarely	15	17%		
Occasionally	20	23%		
Very frequently	7	8%		
I can't decide	6			
Sight-reading			2.59	1.55
Never	32	37%		
Very rarely	15	17%		
Rarely	15	17%		
Occasionally	10	12%		
Very frequently	13	15%		
Always	2	2%		
I can't decide	5			
Playing by ear			2.39	1.53
Never	37	43%		
Very rarely	17	20%		
Rarely	8	9%		
Occasionally	13	15%		
Very frequently	9	11%		
Always	2	2%		
I can't decide	6			
Writing by ear			2.01	1.39
Never	40	47%		
Very rarely	22	26%		
Rarely	11	13%		
Occasionally	10	11%		
Very frequently	3	3%		
I can't decide	6			

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? C: Teachers' Satisfaction of Their Students' Music Learning Outcomes

Question 5 asked music teachers their levels of satisfaction of their students' learning outcomes of the 20 selected curricular content areas. Besides the six response categories, the respondents could choose a seventh category of undecided. Undecided responses were treated as missing values and excluded from the data analysis. Table 8 summarizes the frequencies and percentages of the six response categories, and means and standard deviations of the 20 selected curricular content areas. The frequencies of the 20 selected curricular content areas not shown here can be found in Appendix H.

The mean score of all content areas was 3.24 ± 0.66, ranging from 1.65 to 5.00. The three lowest mean scores were 2.06 ± 1.06 (writing-by-ear), 2.55 ± 1.02 (keyboard playing), and 2.61 ± 1.24 (playing-by-ear). The three highest mean score were 4.65 ± 0.63 (recorder playing), 4.60 ± 0.82 (group singing), and 4.30 ± 0.86 (music appreciation). It must be noted that the highest standard deviation was 1.36 (singing-by-ear). Some music teachers stated that their students' learning outcomes were terrible (13%), unacceptable (23%), or somewhat unacceptable (20%), however, other music teachers stated that these outcomes were somewhat acceptable (17%), good (22%), or excellent (0%).

Table 8

The Frequency, Percentage, Mean, and Standard Deviation of Scores Describing Teachers' satisfaction of Their Students' Learning Outcomes (N = 92)

Category	Frequency	Percentage	Mean	SD	Range
All areas			3.24	0.66	1.65 - 5.00
Recorder playing			4.65	0.63	
Unacceptable	2	2%			
Somewhat unacceptable	26	29%			
Good	60	68%			
Excellent	1	1%			
I can't decide	3				
Group Singing			4.60	0.82	
Unacceptable	2	2%			
Somewhat unacceptable	6	7%			
Somewhat acceptable	25	27%			
Good	51	56%			
Excellent	7	8%			
I can't decide	1				
Music appreciation			4.30	0.86	
Unacceptable	4	4%			
Somewhat unacceptable	5	6%			
Somewhat acceptable	47	52%			
Good	28	31%			
Excellent	6	7%			
I can't decide	1				
Music interests			4.24	0.93	
Unacceptable	5	6%			
Somewhat unacceptable	10	11%			
Somewhat acceptable	39	43%			
Good	31	34%			
Excellent	5	6%			
I can't decide	2				

Table 8

The Frequency, Percentage, Mean, and Standard Deviation of Scores Describing Teachers' satisfaction of Their Students' Learning Outcomes

Category	Frequency	Percentage	Mean	SD
Use internet to learn			3.93	1.17
Stylish difference			3.60	0.90
Conducting			3.40	1.12
Appreciate beauty within nature and arts work			3.38	1.05
Music theory			3.32	1.13
Organize concert			3.30	1.18
Know relationship between music and society			3.28	1.16
Use various mediums to compose			3.23	1.18
Environmental and societal awareness			3.16	1.05
Singing by ear			3.07	1.36
Very terrible	11	13%		
Unacceptable	23	28%		
Somewhat unacceptable	17	20%		
Somewhat acceptable	14	17%		
Good	18	22%		
I can't decide	9			
Sight-singing			2.96	1.11
Very terrible	7	9%		
Unacceptable	23	29%		
Somewhat unacceptable	22	28%		
Somewhat acceptable	21	27%		
Good	6	7%		
I can't decide	13			

Table 8

The Frequency, Percentage, Mean, and Standard Deviation of Scores Describing Teachers' satisfaction of Their Students' Learning Outcomes

Category	Frequency	Percentage	Mean	SD
Sight-reading			2.90	1.25
Very terrible	10	13%		
Unacceptable	25	32%		
Somewhat unacceptable	17	22%		
Somewhat acceptable	16	20%		
Good	10	13%		
I can't decide	14			
Composing			2.80	1.14
Very terrible	10	13%		
Unacceptable	25	33%		
Somewhat unacceptable	17	22%		
Somewhat acceptable	21	27%		
Good	4	5%		
I can't decide	15			
Playing by ear			2.61	1.24
Very terrible	16	21%		
Unacceptable	23	31%		
Somewhat unacceptable	17	23%		
Somewhat acceptable (4)	13	17%		
Good (5)	6	8%		
I can't decide	17			
Keyboard playing			2.55	1.02
Very terrible	10	15%		
Unacceptable	26	38%		
Somewhat unacceptable	18	27%		
Somewhat acceptable	13	19%		
Good	1	1%		
I can't decide	24			

Table 8

The Frequency, Percentage, Mean, and Standard Deviation of Scores Describing Teachers' satisfaction of Their Students' Learning Outcomes

Category	Frequency	Percentage	Mean	SD
Writing by ear			2.06	1.08
Very terrible	23	31%		
Unacceptable	31	41%		
Somewhat unacceptable	11	15%		
Somewhat acceptable	3	4%		
Good	2	3%		
Excellent	1	1%		
I can't decide	17			

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? D: Teachers' Confidence in Planning Lessons for the Arts and Humanities Curriculum

Question 6 asked music teachers their levels of confidence in planning lessons for the 20 selected curricular content areas. Besides the six response categories, the respondents could choose a seventh category of undecided. Undecided responses were treated as missing values and excluded from the data analysis. The means and standard deviations of teacher's confidence in planning lessons for the 20 selected curricular content areas can be found in Table 9.

The mean score of all content areas was 4.62 ± 0.70, ranging from 3.35 to 6.00. All mean scores were higher than 4 (probably). The three lowest mean scores were 4.01 ± 1.60 (keyboard

playing), 4.02 ± 1.33 (writing-by-ear), and 4.06 ± 1.35 (playing-by-ear). The three highest mean scores were 5.48 ± 0.77 (music appreciation), 5.43 ± 0.79 (group singing), and 5.42 ± 0.85 (recorder playing). The frequency of the six response categories of the 20 selected curricular content areas can be found in Table 2 of Appendix H.

Table 9

Mean and Standard Deviation of Scores Describing Teachers' Confidence in Planning Lessons

Category	Mean	Standard Deviation	Range
All areas	4.62	0.70	3.35 - 6.00
Music appreciation	5.48	0.77	3 - 6
Group Singing	5.43	0.79	3 - 6
Recorder playing	5.42	0.85	3 - 6
Cultivating interests in music	4.98	0.90	3 - 6
Music theory	4.87	1.10	1 - 6
Internet application	4.85	1.14	1 - 6
Stylish difference in music	4.79	0.92	3 - 6
Conducting	4.74	1.02	1 - 6
Relate music with societal change	4.52	0.92	2 - 6
Social and environmental relatedness	4.51	1.04	2 - 6
Organizing concert	4.49	1.09	2 - 6
Sing by ear	4.49	1.21	1 - 6
Appreciate beauty in music	4.39	0.99	2 - 6
Sight-singing	4.35	1.18	1 - 6
Sight-reading	4.37	1.28	1 - 6
Multimedia	4.29	1.10	1 - 6
Composing	4.21	1.20	1 - 6
Play by ear	4.06	1.35	1 - 6
Write by ear	4.02	1.33	1 - 6
Keyboard playing	4.01	1.60	1 - 6

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? E: Three Music Curricular Content Areas That Were Considered to Be the Most Important and the Least Important to Be Included in Classroom Instruction

Question 7 asked music teachers to rank the three content areas they considered to be the most important, and the next question asked music teachers to rank the three content areas they considered to be the least important. Table 10 and Table 11 summarize the results of the weighted scores calculated for each curricular content area, with the first rank receiving three points, the second rank receiving two points, the third rank receiving one point, and the remaining rank receiving no points. As can be seen in Table 10, the three highest weighted scores of importance were music appreciation (score of 150), cultivating musical interests (score of 149), and group singing (score of 65). As can be seen in Table 11, the three highest weighted scores of non-importance were writing-by-ear (score of 125), playing-by-ear (score of 81), and sight-reading (score of 58). The frequencies of all content areas can be found in Tables 3 and 4 of Appendix H.

Table 10

The Weighted Scores for the Content Areas Music Teachers Considered to Be the Most Important

Learning outcomes	Weighted score
Music appreciation	150
Music interests	149
Group Singing	65
Recorder playing	56
Music theory	31
Know relationship between music and society	17
Environmental and societal awareness	13
Appreciate nature beauty and arts work	12
Stylish difference	7
Organize concert	6
Use internet to learn	4
Conducting	4
Sight-singing	3
Sight-reading	1
Writing-by-ear	0
Singing-by-ear	0
Playing-by-ear	0
Keyboard playing	0
Composing	0
Use various mediums to compose music	0

Table 11

The Weighted Scores for the Content Areas Music Teachers Considered to Be the Least Important

Learning outcomes	Weighted score
Writing-by-ear	125
Playing-by-ear	81
Sight-reading	58
Keyboard playing	51
Sight-singing	29
Conducting	24
Singing-by-ear	22
Use various mediums to compose	22
Composing	18
Music theory	12
Stylish difference	9
Environmental and societal awareness	9
Appreciate nature beauty and arts work	7
Know relationship between music and society	5
Organize concert	4
Recorder playing	3
Music appreciation	0
Music interests	0
Group Singing	0
Use internet to learn	0

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? F: Implementation Obstacles Music Teachers Had Experienced

Question 9 asked what implementation obstacles the music teachers had experienced. The respondents marked any implementation obstacle they had experienced. Of the 92 respondents, only 4 music teachers stated that they had not experienced any implementation obstacle. Table 12 summarizes the frequencies of the 12 implementation obstacles. The top three were insufficient administrative support (n = 48, 52%), shallow music learning (n = 48, 52%), and insufficient parents' knowledge of the Arts and Humanities Curriculum (n = 40, 43%). There were 40 music teachers (43%) who stated that the concept and value of the integrated curriculum were not well communicated to the parents, 26 music teachers (28%) who stated that there was no one initiating curriculum integration in their teams, 19 teachers (20%) who stated that they had not been properly trained to teach an integrated curriculum, 17 teachers (18%) who stated that their students were having discipline problems due to curriculum integration, 17 teachers (18%) who stated that they lacked team teaching experience, 14 teachers (15%) who stated that they had difficulties in student assessment, 13 teachers (14%) who stated that they had no common team planning time with visual arts and theater teachers, 8 teachers (8%) who stated that they lacked knowledge for curriculum integration, and 6 teachers (6%) who stated that they were not used to

working with teachers of other subjects. No teacher stated that lack of a team leader was an obstacle.

An open-ended question followed that asked the respondents to write additional implementation obstacles they had encountered. Some teachers stated that the integrated units of the pre-packaged integrated arts textbooks which were used in the schools were poorly designed. In some small rural schools, teachers who taught music classes had limited or no musical background. These teachers stated that they felt incompetent to implement the Arts and Humanities Curriculum.

Table 12

The Frequency of Implementation Obstacles Encountered by Music Teacher (N = 92)

Difficulty	Count	%
Insufficient administrative support	48	52%
Shallow music learning	48	52%
Insufficient Parents' knowledge of new curriculum	40	43%
Availability of Torch Bearer	26	28%
Insufficient teacher training	19	20%
Student discipline problems	17	18%
Insufficient team teaching experience	17	18%
Student assessment difficulty	14	15%
Common planning time schedule conflict	13	14%
Insufficient teacher's knowledge of curriculum integration	8	8%
Uneasiness let others teach my subject	6	6%
Lack of team leader	0	0%
No obstacle	4	4%

Question 2: To What Extent Were Teachers' Attitudes toward Following the Arts and Humanities Curriculum related to the Following Four Curriculum Integration Factors?

A. The Quantity of Musical Content Areas Taught in Music Class

B. Teachers' Satisfaction of Their Students' Music Learning Outcomes

C. Teachers' Confidence in Planning Lessons for the Arts and Humanities Curriculum

D. The number of years the Music Teachers Had Implemented An Integrated Curriculum

The correlation analysis only included the respondents who had completely answered the content questions. Those who failed to respond to at least 1 of the 20 content area questions were excluded from the data analysis. Scatter diagrams were used to identify possible outliers, however, no outliers were identified. Because four correlations were conducted, the Bonferroni test (α /*n* correction) was used to reduce the risk of a Type I error. To be significant, a correlation required a Bonferroni-adjusted alpha level of 0.0125.

The results of the first Pearson Product-Moment Correlation Coefficient showed a low, positive, significant relationship between teachers' overall attitudes toward following the Arts and Humanities Curriculum and the quantity of musical content areas taught ($n = 83$, $r = 0.29$, $p = 0.007$, $r^2 = 0.09$). It must be noted that this low, but significant positive correlation was small and the percentage of variance accounted for by the significant correlation was only 9%.

There was a low, positive, non-significant relationship between teachers' attitudes toward following the Arts and Humanities Curriculum and teachers' satisfaction of their students' musical learning outcomes ($n = 53$, $r = 0.34$, $p = 0.014$, $r^2 = 0.12$). Very weak, negative, non-significant relationships were found between teachers' overall attitudes toward following the Arts and Humanities Curriculum and (1) teachers' confidence in planning lessons ($n = 77$, $r = -0.01$, $p = 0.93$, $r^2 = 0.0001$) and (2) their years of experience in curriculum integration ($n = 89$, $r = -0.003$, $p = 0.98$, $r^2 = 0.00009$). The correlation results can be found in Table 13.

Table 13

Pearson's Product-Moment Coefficient Correlation for Teachers' Overall Attitudes toward Following the Arts and Humanities Curriculum with the Four Selected Integration Factors

	Teachers' overall attitudes ($N = 92$)	
Factors	Pearson's r	p
Musical content areas covered ($n = 83$)	0.29	0.007*
Teachers' satisfaction of student music learning outcomes ($n = 53$)	0.34	0.014
Teacher's confidence in planning lessons ($n = 77$)	-0.01	0.93
Years of integration experience ($n = 89$)	-0.003	0.98

*Correlation is significant at the 0.0125 level (2-tailed).

CHAPTER 5

CONCLUSION AND SUGGESTIONS

Introduction

This chapter presents a summary of the entire project including the purpose of this study, the research questions, the methodology of the study, the findings, and the conclusions and discussion. This chapter also includes recommendations and suggestions for future studies.

Need and Purpose of the Study and Research Questions

Gaskins (1994) and Tipton (1997) stated that teachers' attitudes might play a crucial role in the success of curriculum integration. The findings of studies investigating initial Taiwan teachers' attitudes toward following the new National Nine-Year Integrated Curriculum imposed by the Minister of Education in Taiwan in 2001 have been mixed. Both Hsieh (2001) and Huang (2000) found that teachers had negative attitudes toward implementing the new curriculum. Wang (2000) found a slightly positive attitude toward implementing the integrated curriculum. Wang further speculated that teachers' attitudes may increase after teachers started using the Taiwan National Nine-Year Integrated Curriculum. Wang's (2000) speculation was based on the finding reported by Murphy (1993) that as a consequence of participating in an interdisciplinary curriculum, teachers' attitudes, which were found to be neutral at the beginning of Murphy's study, became positive toward the instructional impact of an integrated curriculum.

To ensure the success of the new curriculum, the Taiwan MOE provided staff development workshops to prepare music teachers to teach the Arts and Humanities Curriculum. In addition to 2 years of pilot implementation, the new curriculum had been used for 4 years at the time of the current study. Therefore, it was necessary to know whether music teachers liked or disliked the Arts and Humanities Curriculum.

The purpose of this study was to investigate teachers' attitudes toward following the Arts and Humanities Curriculum and to determine the relationship of teachers' attitudes to four selected curriculum integration factors. These curriculum integration factors included, (1) The quantity of content areas taught in music class, (2) Teachers' satisfaction of their students' learning outcomes, (3) Teachers' confidence in planning lessons, and (4) The number of years spent in curriculum integration. The following research questions were addressed:

1. What were music teachers' attitudes toward following the Arts and Humanities Curriculum?
    A. Teachers' attitudes toward following the fine arts component of the National Taiwan Nine-Year Integrated Curriculum;
    B. The quantity of musical content areas taught in music class;
    C. Teachers' satisfaction of their students' music learning outcomes;
    D. Teachers' confidence in lesson planning for the Arts and Humanities Curriculum;

E. Three music curricular content areas that were considered to be the most important and the least important to be included in classroom instruction; and

F. Implementation obstacles music teachers had experienced.

2. To what extent were teachers' attitudes toward following the Arts and Humanities Curriculum related to the following four curriculum integration factors?

A. The quantity of musical content areas taught in music class;

B. Teachers' satisfaction with their students' music learning outcomes;

C. Teachers' confidence in planning lessons for the Arts and Humanities Curriculum; and

D. The number of years music teachers had implemented an integrated curriculum.

Methodology of the Study

To investigate teachers' attitudes toward following the Arts and Humanities Curriculum of Taiwan, questionnaires were distributed to administrators in 85 Taiwan junior high schools to be forwarded to music teachers in their schools. These schools were selected by using a stratified random sampling technique. A total of 92 responses were received from 63 responding schools.

Questionnaires were originally sent to 96 junior high schools, with 24 schools (25%) from each of the four geographical regions. Among the 96 schools, there were 42 schools (44%) in which the Arts and Humanities Curriculum had been pilot-tested since 1999, and 54 schools

(56%) which had implemented the Arts and Humanities Curriculum in 2001. It was speculated that more music teachers were hired in large schools than those in small schools; therefore, 48 small schools (50%) with 1 to 12 classes, 32 medium schools (33%) with 13 to 36 classes, and 16 large schools (17%) with more than 36 classes were selected. After the first mailing, 11 small schools were removed from the sample because these schools had no music teacher; one small school was re-classified as a medium school. The number of schools sampled was decreased from 96 to 85. Of these 85 schools, 92 questionnaires were collected from teachers in 63 responding schools. The school response rate was 74%. To verify whether those non-responding school teachers' attitudes were similar to those received, the researcher conducted informal interviews with four teachers from non-responding schools. Their answers tended to fall in the middle range, which were very similar responses to the other responses.

The break-down of the 63 responding schools and 92 completed questionnaires is as follows. Of the 63 schools, 38 questionnaires (41%) were received from 27 responding schools where the National Nine-Year Integrated Curriculum had been implemented since 1999, and 54 questionnaires (59%) were received from 36 responding schools where the National Music Curriculum had been implemented in 2001. There were 20 music teachers (22%) from 13 responding northern schools, 21 teachers (23%) from 16 responding central schools, 36 teachers (39%) from 20 responding southern schools, and 15 teachers (16%) from 14 responding eastern

and island schools. There were 28 questionnaires (30%) from 28 responding small schools, 28 questionnaires (30%) from 22 responding medium schools, and 36 questionnaires (40%) from 13 responding large schools.

Content validity was checked by documenting if the content questions were represented in the National Music Curriculum and the Art and Humanities curriculum. The average percentage of how well the content areas selected represented the curricular content areas of these two curricula ranged from 76% to 86%. The internal consistency reliability obtained by calculating the Cronbach's alpha values for the second pilot study and the main study questionnaire questions ranged from 0.74 to 0.92. Data analysis was conducted using descriptive statistics and Pearson Product-Moment Correlation Coefficients; these statistics were run using the SPSS 13.0 program.

Findings

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? A: Teachers' Attitudes toward Following the Fine Arts Component of the National Taiwan Nine-Year Integrated Curriculum

The respondents indicated their level of agreement to three statements on a 6-point rating scale: strongly disagree, disagree, slightly disagree, slightly agree, agree, and strongly agree. Besides the six response categories, the respondents could select an additional seventh category

of undecided. Undecided responses were treated as missing values and excluded from the data analysis.

The mean scores of teachers' responses fell between slightly disagree and slightly agree; in other words, their overall attitudes toward following the new curriculum fell near the middle of the possible choices. The teachers' responses to the statement, I prefer the Arts and Humanities Curriculum over the old National Music Curriculum had the highest mean score, followed by the statement, I like the way music is taught in class after the Arts and Humanities Curriculum is implemented, and the statement, I will completely follow the Arts and Humanities Curriculum. The statement, I prefer the new curriculum over the traditional curriculum, had the highest standard deviation. Some music teachers stated that they agreed, slightly agreed, or strongly agreed with this statement, however, other music teachers stated that they disagreed, slightly disagreed, or strongly disagreed.

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? B: The Quantity of Musical Content Areas Taught in Music Class

The respondents answered on a 6-point rating scale: never, very rarely, rarely, occasionally, very frequently, and always. Besides the six response categories, the respondents could select an additional seventh category of undecided. Undecided responses were treated as missing values and excluded from the data analysis.

The mean scores of teachers' responses fell between rarely and occasionally; in other words, their overall teachers' responses to the quantity of the 12 selected musical content areas taught in class fell near the middle of the range of choices. Writing-by-ear had the lowest mean score, followed by playing-by-ear and sight-reading. Recorder playing had the highest mean score, followed by music appreciation and group singing. To address the competencies mandated by the new curriculum, music teachers applied recorder playing, music appreciation, group singing at least very frequently, which were musical experiences specified in the guideline for the old curriculum. Singing-by-ear had the highest standard deviation. Some music teachers stated that they never, very rarely, or rarely used singing-by-ear activity in class, however, other music teachers stated that they occasionally, very frequently, or always did.

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? C: *Teachers' Satisfaction of Their Students' Music Learning Outcomes*

The respondents answered on a 6-point rating scale: very terrible, unacceptable, somewhat unacceptable, somewhat acceptable, good, and excellent. Besides the six response categories, the respondents could select an additional seventh category of undecided. Undecided responses were treated as missing values and excluded from the data analysis.

The mean scores of teachers' responses fell between somewhat unacceptable and somewhat acceptable; in other words, the overall teachers' satisfaction of their students' musical

learning outcomes again fell near the middle of the possible choices. Writing-by-ear had the lowest mean score, followed by keyboard playing and playing-by-ear. Recorder playing had the highest mean score, followed by group singing and music appreciation. Singing-by-ear, again, had the largest standard deviation. Some music teachers stated that their students' learning outcomes were terrible, unacceptable, or somewhat unacceptable; however, other music teachers said that these outcomes were somewhat acceptable or good.

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? D: *Teachers' Confidence in Planning Lessons for the Arts and Humanities Curriculum*

The respondents answered on a 6-point rating scale: definitely not, very probably not, probably not, probably, very probably, and definitely. Besides the six response categories, the respondents could select an additional seventh category of undecided. Undecided responses were treated as missing values and excluded from the data analysis.

The overall teachers' confidence in planning lessons tended toward the positive side of the response category. Of the 20 selected content areas, keyboard playing had the lowest mean score, followed by writing-by-ear and playing-by-ear. Music appreciation had the highest mean score, followed by group singing and recorder playing. Overall, the music teachers showed

confidence in their abilities to plan lessons according to both old and new curricular guidelines, especially in areas of music appreciation, group singing, and recorder playing.

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? E: *Three Curricular Content Areas That Were Considered to Be the Most Important and the Least Important to Be Included in Classroom Instruction*

The respondents chose three content areas each as the most and the least important to be included in classroom instruction. The first rank received three points, the second rank received two points, and the third rank received one point. Music appreciation had the highest importance score, followed by cultivating musical interests and group singing. Writing-by-ear had the highest least importance score, followed by playing-by-ear and sight-reading.

Question 1: What Were Music Teachers' Attitudes toward Following the Arts and Humanities Curriculum? F: *Implementation Obstacles Music Teachers Had Experienced*

The respondents marked any implementation obstacle that they had experienced. Of the 92 respondents, only 4 music teachers reported that they had no implementation obstacle. Insufficient administrative support and teachers' concern of students' shallow music learning were the most frequently reported obstacles, followed by teachers' concerns of insufficient parents' knowledge of the integrated curriculum, no one initiating curriculum integration in their teams, insufficient teacher training, student discipline problems, insufficient team teaching

experiences, student assessment difficulties, common planning time scheduling conflicts, insufficient teachers' knowledge of curriculum integration, and the uneasiness of allowing others to teach their own subject. The lack of team leader was not reported by teachers as an implementation obstacle.

Some teachers stated that the integrated units of the pre-packaged integrated arts textbooks which were currently used in the schools were poorly designed. Some teachers who taught in small rural schools, with limited or no musical background, felt incompetent to implement the new curriculum.

Question 2: To What Extent Were Teachers' Attitudes toward Following the Arts and Humanities Curriculum related to the Following Four Curriculum Integration Factors?

A. The Quantity of Musical Content Areas Taught in Music Class

B. Teachers' satisfaction of their students' music learning outcomes

C. Teachers' confidence in planning lessons for the Arts and Humanities Curriculum

D. The number of years the music teachers had implemented an integrated curriculum

Using a Bonferroni-adjusted alpha level of 0.0125, the results of the first Pearson Product-Moment Correlation Coefficient showed a low, positive, significant relationship between teachers' overall attitudes toward following the Arts and Humanities Curriculum and the quantity of musical content areas taught ($n = 83$, $r = 0.29$, $p = 0.007$, $r^2 = 0.09$). Hence, there was a trend

for those teachers with more positive attitudes toward the new curriculum to also teach more musical content. However, it must be noted that this significant relationship was small and the percentage of variance accounted for by the significant correlation was only 9%.

There was a low, positive, non-significant relationship between teachers' attitudes toward following the Arts and Humanities Curriculum and teachers' satisfaction of their students' musical learning outcomes ($n = 53$, $r = 0.34$, $p = 0.014$, $r^2 = 0.12$). Very weak, negative, non-significant relationships were found between teachers' overall attitudes toward following the Arts and Humanities Curriculum and (1) teacher's confidence in planning lessons ($n = 77$, $r = -0.01$, $p = 0.93$, $r^2 = 0.0001$) and (2) their years of experience in curriculum integration ($n = 89$, $r = -0.003$, $p = 0.98$, $r^2 = 0.00009$). No outlier was found in the scatterplots describing these four correlations.

Conclusion and Discussion

The results of this study showed that music teachers' overall attitude responses toward following the Arts and Humanities Curriculum tended to fall in the middle of the possible choices. In other words, the music teachers were neither strongly supportive nor against the new curriculum. This result is different from previous findings that teachers' attitudes toward the Taiwan National Nine-Year Integrated Curriculum were found to be directional, with Hsieh

(2001) and Huang (2000) on the negative side and Wang (2000) on the positive side. The difference might be because of the different scales used.

Hsieh (2001) had teachers answering on a dichotomous scale, while Huang (2000) gave teachers four nominal choices: Agree, Disagree, Conditionally, and No Opinion, and Wang measured teachers' attitudes with a 5-point rating scale, ranging from Strongly Agree to Strongly Disagree, with a middle neutral point. Only in Wang's questionnaire were the teachers able to choose a neutral point.

Wang (2000) speculated that the teachers would show positive attitudes toward the new curriculum after the teachers used the new curriculum. The result of the current study did not show sufficient evidence that teachers' attitudes shifted toward a distinct liking for the new curriculum after four years of experience with the new curriculum. This finding might be frustrating for those who hoped for a more wide-spread acceptance of the new curriculum after working with the new ideas. Perhaps the music teachers might need a longer period of time spent on the new approach to appreciate the new curriculum.

Perhaps the most meaningful conclusion that might be made is based upon the literature that examined teachers' attitudes. Attitudes and beliefs were found to be difficult to change. Among preservice and inservice teachers, simple strategies such as coursework or inservices have not typically resulted in belief change (Barry & Lecher, 1995; Grant & Koskela, 1986;

McDiarmind, 1992). Other researchers have found that many program interventions have had little effect upon the beliefs about teaching that beginning teachers have brought to teacher training education (Wideen, Mayer-Smith, & Moon, 1998; Kenny, 1994). Studies that resulted in attitude change were ones in which a variety of strategies were used (Aronsohn, Carter, & Howell, 1995; Boyle-Baise & Sleeter, 2000; Fry & McKinney, 1997). Based on prior research, if attitudes that are formed from personal histories are difficult to change, and in order to change attitudes, multiple strategies must be used, then the findings of this study indicate that the new integrated curriculum in Taiwan might not be successfully implemented. The majority of teachers did not strongly support or reject this new curriculum, and strong support would be needed for the curriculum to be successfully implemented. Based on prior research, one of the most important things that the Taiwan MOE could do is to provide music teachers with on-going in-service teacher development programs and monitoring mentor systems, in addition to the exploration and development of additional strategies that might possibly impact teachers' neutral beliefs about this new curriculum. These programs could focus on building teachers' knowledge and skills needed for implementing the integrated curriculum, persuade them to adopt new innovations in teaching, and help encourage their positive beliefs about curriculum integration.

The results of this study showed that recorder playing, group singing, and music appreciation were the most frequently taught musical skills; teachers' satisfaction of their

students' learning outcomes in these three areas, was among the highest. The results also showed that music teachers felt the most confident in planning lessons using recorder playing, group singing, and music appreciation. Prioritizing of important musical accomplishments by the teachers also indicated that they felt that recorder playing, group singing, and music appreciation were most important to be included in music instruction. Recorder playing, group singing, and music appreciation were musical experiences from the old curricular guideline. Based on the findings, the current study suggests that administrators might consider giving teachers in-service workshops on topics related to ways for recorder playing, group singing, and music appreciation to address Competency Indicators of the new curriculum.

Writing-by-ear and playing-by-ear were found to be the least frequently taught and the least important activities. The results also showed that music teachers felt the least confident to teach these two skills. Moreover, music teachers reported that their students' learning outcomes in these two areas were among the least satisfactory. The ability to reproduce and/or notate melodic and rhythmic sequences has often been thought to be a musical skill that requires extensive music training, and hence, the music teachers might not be able to find enough time to teach these skills in class and/or they themselves might not feel well-trained to teach these skills at a high level. They might also consider these skills to be less applicable to real-life, in contrast to singing and music appreciation. Without receiving enough instruction, the students may not be

able to perform these skills well. An investigation into the most appropriate approaches to teach aural dictation skills would be helpful for music teachers. The teaching and learning of aural dictation skills in the classroom need to be observed and monitored and investigated further in order to get a more complete understanding of this complex topic.

Most teachers in the current study had encountered at least one of the 12 listed implementation obstacles. There were only 4 music teachers who reported not experiencing any obstacles in their implementation of the new curriculum. The two most frequently encountered obstacles were insufficient administrative leadership and shallow music learning, which also were found by Goode (1998) and Tipton (1997). This agreement between studies was notable because the implementation obstacles found in the studies conducted in the United States were also encountered by Taiwan music teachers. Lessons learned in the United States might help to overcome obstacles presented in Taiwan.

Regarding ways to reinforce administrative support, Goode (1998) suggested that support from the administration had to be more than allotting on-going planning time and scheduling students. It had to be a deliberate action. The current study suggests the following, (1) allowing the teachers and administrators to meet regularly, (2) getting released from duty time during the school day, (3) having more time that can be spent on actual planning, (4) having money budgeted for time out of school to be spent on curriculum planning, and (5) having incentives for

teachers who successfully implement the new curriculum. Greenberg (1995) noted that interdisciplinary team teachers felt positive about being recognized by administrators for their work. The current study suggests that after teachers experience success in teaching the new curriculum, administrators may want to consider recognizing teachers' efforts and reinforcing their positive experiences concerning teaching the new curriculum.

The finding from the past research addressing teachers' concerns over covering content and covering it in depth was also found to be the most selected category for the music educators in the current study. This finding corroborated Barrett, McCoy and Veblen's (1997) claim that the major concern for integrating music with other subjects was insufficient time allowed to cover the musical content areas to the same depth as when music was taught independently. This finding also showed that music teachers felt that they were not able to cover as much content as they had previously covered, contributing to the concern that students might be learning less. This leads to a fundamental issue that establishing measurable learning outcomes addressing each Competency Indicator of the new curriculum may be needed for the music teachers to evaluate how well the students have learned using the new curriculum.

A low, but significant positive relationship was found between teachers' overall attitudes toward following the Arts and Humanities Curriculum and the quantity of musical content taught in class. Those teachers who tended to teach musical content areas more regularly also tended to

be more positive about the new curriculum. It must be noted that this significant correlation was small and the percentage of variance accounted for by the significant correlation was 9%. Alternative explanations might exist for this relationship. Music teachers who had experienced an innovative teaching method from a curriculum change might also be more interested and motivated by new challenges. Another explanation might be that curiosity about the impact on the students' learning embedded in lesson preparation might inspire them to cover the subject content areas with more depth and breadth. By receiving more feedback from the students as to the impact of the integrated curriculum, teachers may have shown a higher level of liking for the new curriculum. These speculations cover only a small number of possible reasons; many more individual reasons may be likely to exist.

A low, non-significant positive relationship was found between teachers' overall attitudes toward following the Arts and Humanities Curriculum and their satisfaction of their students' music learning outcomes. The current study had insufficient evidence to support the claim made by Hove-Pabst (1994) that the more satisfied the teachers felt with their students' learning outcomes, the more they liked to participate an integrated curricular approach. The discrepancy found might stem from a lack of presenting a successful integrated curricular example to the teachers prior to the survey. In Hove-Pabst's study, after the implementation of a successful music-integrated curriculum, Hove-Pabst interviewed the classroom teacher regarding whether

students' improvements impacted or changed teacher's attitudes toward using an integrated curricular approach. Since the success of the program might be a telling factor, this leads to a fundamental concern of lacking tangible standard to evaluate students' learning outcomes in the current integrated curricular practice. In addition to musical skills and knowledge, it may be valuable for the evaluation standards to cover students' problem solving abilities and creativity, their abilities to relate learning of various subjects, and their abilities to apply learning to real life situations.

This study found that Taiwan music teachers were confident in planning lessons to address Competency Indicators of the Arts and Humanities Curriculum, which was contrary to Huang's (2000) finding. In addition, a very weak, non-significant negative relationship was found between teachers' overall attitudes toward following the Arts and Humanities Curriculum and their lesson planning confidence. There was no previous research study investigating the relationship between teachers' attitudes toward an integrated curricular approach and their level of confidence in planning integrated lessons. Based on this finding, the researcher concludes that teachers' attitudes toward following the new curriculum were not significantly related to their levels of confidence in preparing lessons.

A very weak, non-significant negative relationship was found between teachers' attitudes and their years of experience in curriculum integration. Those with more experience in

integration statistically showed neither a more positive nor a more negative attitude toward the curriculum than those with less integration experience. This finding contradicted findings of Murphy (1993) and Wang (2000).

Suggestions for Future Studies

This study showed that the teachers' overall attitude toward following the Arts and Humanities Curriculum was significantly related to the quantity of musical content areas covered in class. Future studies could design a series of experiments that include specially developed music-integrated programs (e.g. various integration levels, various subject combinations) as treatment variables aimed at whether the amount of musical skills and knowledge the students acquire in class significantly differ, and whether teachers' attitudes toward using the new curriculum significantly change. Also, future investigators could expand the current study to include the other fine arts teachers (e.g. visual arts, theater arts). Are the results similar to this study, or are there special needs and considerations associated with the other fine arts teachers? A problem noted by the researcher in gathering information was that teachers omitted certain content areas (e.g. aural dictation, sight reading, and auditory training) from their classroom presentations in order to implement the integrated curriculum. It would be valuable to know what influences teachers' decisions to choose musical content areas for classroom instruction.

Although the Taiwan MOE asked every school to implement the Arts and Humanities Curriculum, the curriculum decisions at the level of implementation were left to the schools and music teachers. The music teachers may have integrated music with other subjects at a level at which they felt the most confident. Future studies could focus on finding what level of involvement music teachers are involved in with curriculum integration and its relationship to their attitudes toward teaching an integrated arts curriculum. A future study could also examine teachers' attitudes within sub-groups of age, educational background, and length of curriculum integration experiences for additional information on teachers' attitudes. In addition to survey research techniques, future studies could use observations and interviews to obtain more in-depth information.

Since curriculum integration was the hallmark of the new curriculum, and because experiences in these methods courses become the practical curriculum in the schools, investigating whether undergraduate methods courses include content that addresses the integrated arts curriculum, its planning, and its implementation, and what influences decisions of those who teach these method courses would be an interesting research idea. In addition, future studies could investigate any connection between music teachers' training, prior experiences in the other arts subjects, and their level of confidence in teaching an integrated arts curriculum.

APPENDIX A

COMPETENCY INDICATORS

Part A: Competency Indicators of the Arts and Humanities Curriculum (2003), 7th to 9th grades

1. Students should be able to understand the relationships for an original work of arts with the society and culture when it was created.
2. Students should be able to create an original work of art using resources from music, visual art, and theater.
3. Students should be able to express personal and/or group feelings and values through learning how to use suitable resources and techniques from music, art, and theater.
4. Students should be able to use a variety of arts resources to explore the stylistic differences between traditional (i.e. Western classical music, Chinese opera, etc.) and non-traditional (rap, body painting, etc.) music, visual art, and theater.
5. Students should be able to create works of art which are applicable to their everyday life through learning how to combine fine arts and multi-media.
6. Students should be able to observe and understand the feelings and responses of human beings through music appreciation, art show, and/or performance (i.e. concert, theater, paintings).
7. Students should be able to create art works to reflect societal concerns (i.e. child abuse, domestic violence, drug, gangs, etc.) and environmental issues (i.e. air pollution, recycling, protecting endangered species, etc.).
8. Students should be able to develop their independent and analytical thinking through creating works of art.

9. Students should be able to express themselves through creating art works.
10. Students should be able to appreciate and appreciate nature beauty, man-made surroundings, and works of art.
11. Students should be able to distinguish and describe the content, forms, and characteristics of various forms of art.
12. Students should be able to experience and differentiate between classical and modern arts, and between popular and elite arts.
13. Students should be able to understand the lifestyle and values of people from different historical periods and cultural orientation.
14. Students should be able to use modern technology (such as internet) to collect art-related information from around the world, to understand trends of modern arts, and to learn about other cultures.
15. Students should be interested in art performance and art appreciation.
16. Students should be involved in an art activity that corresponds with his/her personality, interest, and ability.
17. Students should have initiative, cooperation, mutual respect, self-discipline, communication, and leadership by learning how to organize concerts, theater performances, and art shows.

Part B: 2003 藝術與人文課程標準七到九年級能力指標

1. 了解藝術創作與社會文化的關係

2. 運用音樂、美術、劇場的資源，從事藝術創作

3. 運用合適的音樂、美術、劇場的資源和技巧，表達個人和團體的情感和價值觀

4. 嘗試各種藝術媒體,探求傳統（例如西洋古典音樂、中國國劇）與非傳統藝術（例如陳達民間說唱、人體彩繪）風格的差異

5. 結合藝術與多元媒體，設計並製作藝術作品，它不僅能傳達藝術家的價值觀，還能運用在日常生活上

6. 藉由聆賞、觀賞、或表演藝術作品（例如音樂會、劇場表演、畫展等等），來體察人群間各種情感和反應

7. 藉由藝術創作，反映出社會關懷（例如兒童虐待、家庭暴力、吸毒、幫派）和環境保護的議題（例如空氣污染、資源回收、保護瀕臨絕種生物）

8. 藉由藝術欣賞和創作，發展獨立思考分析的能力

9. 藉由藝術欣賞和創作，發展獨特的表現能力

10. 藉由藝術教育，教導學生如何欣賞和分析自然、人工、和藝術品的美

11. 藉由藝術教育，教導學生如何辨識及描述各種藝術品的內容、形式、與特性

12. 藉由藝術教育，教導學生如何感受及辨別古典藝術與當代藝術,精緻藝術與大眾藝術風格的差異

13. 藉由藝術作品，教導學生不同時代, 不同社會的藝術生活與價值觀

14. 運用資訊科技（例如網際網路）,蒐集中外藝術資料,了解當代藝術生活趨勢,增廣對文化的認知範圍

15. 藉由藝術教育，幫助學生養成日常生活中藝術表現與欣賞的興趣與習慣
16. 藉由藝術教育，幫助學生選擇適合自己的性向、興趣、與能力的藝術活動，並能繼續學習
17. 透過有計畫的音樂會、劇場和畫展, 幫助學生學習主動、合作、尊重、秩序、溝通、協調的團隊精神

Part C: Comparison between versions (2003 versus 2004)

# of Competency Indicator (2003)	#/能力指標 Competency Indicators (2004)
1	1. 了解藝術創作與社會文化的關係,表達獨立的思考能力,嘗試多元的藝術創作.
2	(Combining #1, 2, 8 of 2003edition)
8	
3	2. 體察人群間各種情感的特質,設計關懷社會與自然環境的主題,運用適當的媒體與技法,傳達個人與團體情感與價值觀,發展獨特的表現.
6	
7	(Combining #3, 6, 7, 9 of 2003 edition)
9	
4	3. 嘗試各種藝術媒體,探求傳統與非傳統藝術風格的差異.
5	4. 結合藝術與科技媒體,設計製作生活運用及傳達訊息的作品.
10	5.鑑賞各種自然物,人造物,與藝術作品,分析其美感與文化特質.
11	6.辨識與描述各種藝術品內容,形式,與媒體的特性.
12	7.感受及識別古典藝術與當代藝術,精緻藝術與大眾藝術風格的差異,體會不同時代,社會的藝術生活與價值觀 (Combining #12 and #13)
13	
14	8.運用資訊科技,蒐集中外藝術資料,了解當代藝術生活趨勢,增廣對藝術文化的認知範圍.
15	9.養成日常生活中藝術表現與鑑賞的興趣與習慣.
16	10.透過有計畫的集體創作與展演活動,表現自動,合作,尊重,秩序,溝通,協調的團隊精神與態度.
17	11.選擇適合自己的性向,興趣,與能力的藝術活動繼續學習.

APPENDIX B

QUESTIONNAIRE USED IN THE MAIN STUDY

1. This question wants to know your attitude toward the Arts and Humanities Curriculum, please use the following scale to answer each statement.

1. Strongly Disagree 2. Disagree 3. Slightly Disagree 4. Slightly Agree 5. Agree 6. Strongly agree 0. Undecided

a. ( ) The Arts and Humanities Curriculum can provide the students a comprehensive arts education.

b. ( ) The Arts and Humanities Curriculum can efficiently promote students' learning of fine arts.

c. ( ) Music education should be free from a performance-oriented teaching and elite arts philosophy.

d. ( ) I will completely follow the Arts and Humanities Curriculum.

e. ( ) I like the way music is taught after the Arts and Humanities Curriculum is implemented.

f. ( ) I prefer the Arts and Humanities Curriculum over the old National Music Curriculum.

2. This question wants to know your experience in curriculum integration. Please use (√) to indicate your answer.

a. How many 7th-9th grade classes at your present school?	1-12 ( )			13-36 ( )			37 and above ( )					
b. How many years have you applied the concept of curriculum integration?	0 ( )	1 ( )		2 ( )	3 ( )		4 ( )	5 and Above ( )				
c. Have you worked on school-based multi-subjects curriculum integration? (not using the textbooks)	Yes ( )					No ( )						
d. Have you integrated curriculum among music, visual arts, and theater? (not using the textbooks)	Yes ( )					No ( )						
e. Have you read the Competency Indicators section of the Arts and Humanities Curriculum?	Yes ( )					No ( )						
f. Does your school arrange a regular common planning time for you and your colleagues of the Arts and Humanities team?	None ( )			Yes, I attend ( )			Yes, they do, but I do not attend ( )					
g. How often does this common planning time occur?	Never ( )	Weekly ( )	Bi-weekly ( )	Monthly ( )	Bi-monthly ( )	Semester ( )	Irregular ( )					

h. What things impeded you from attending the common planning meetings?	( ) I attend the common planning meeting time. Reason(s) for not attending: (check all that apply) ( ) I have schedule conflict for attending the common planning time. ( ) There is no common planning time scheduled. ( ) Others, please list _____
i. What things have you discussed in the common planning time?	( ) I do not attend the common planning time. Things discussed: (check all that apply) ( ) Discuss your own class syllabus and content ( ) Brainstorm ideas for teaching ( ) Discuss how to share teaching responsibilities ( ) Brainstorm ideas for possible topics to integrate related subject s ( ) Discuss the thematic-integrated units ( ) Discuss how to guide the students to generate the learning theme ( ) None of the above ( ) Other, _____

3. How often do you teach the following musical content areas in music classroom?

1- Never 2- Very Rarely 3- Rarely 4- Occasionally 5-Very Frequently 6- Always

0- Undecided

a. Music Theory ( )

b. Music Fundamentals

Writing-by-ear ( )

Singing-by-ear ( )

Playing-by-ear ( )

Conducting ( )

Sight-singing ( )

Sight-reading ( )

c. Group Singing ( )

d. Instrument

Recorder ( )

Keyboard ( )

e. Composing ( )

f. Music Appreciation ( )

4. In addition to the musical content areas mentioned above, what else have you taught in music class?

( ) Nothing else ( ) Yes, such as

_____

_____

5. What do you rate your students' learning in the following content areas?

1- Very Terrible 2- Unacceptable 3- Somewhat Unacceptable 4- Somewhat Acceptable 5- Good 6-Excellent 0- Undecided

a. Music theory ( )
b. Music fundamentals
Writing-by-ear ( )
Singing-by-ear ( )
Playing-by-ear ( )
Conducting ( )
Sight-singing ( )
Sight-reading ( )
c. Group Singing ( )
d. Play Instrument
Recorder ( )
Keyboard ( )
e. Composition ( )
f. ( ) Music appreciation
g. ( ) Cultivate students' interests of the fine arts
h. ( ) Differentiate various music styles
i. ( ) Participate in concerts and drama
j. ( ) Relate music with the society
k. ( ) Appreciate and analyze the beauty of nature, man-made surroundings, and works of art.
l. ( ) Use the internet to collect information on trends in modern art.
m. ( ) Use multi-media to compose music
n. ( ) Able to reflect on societal concerns and environmental issues.

6. What do you perceive yourself as being capable in designing lessons for the following curricular content areas?

1-Definitely Not 2-Very Probably Not 3-Probably Not 4-Probably 5-Very Probably 6-Definitely 0- Undecided

a. Music theory ( )
b. Music fundamentals
Writing-by-ear ( )
Singing-by-ear ( )
Playing-by-ear ( )
Conducting ( )
Sight-singing ( )
Sight-reading ( )
c. Group Singing ( )
d. Play Instrument
Recorder ( )
Keyboard ( )
e. Composition ( )
f. ( ) Music appreciation
g. ( ) Cultivate students' interests of the fine arts
h. ( ) Differentiate various music styles
i. ( ) Participate in concerts and drama
j. ( ) Relate music with the society
k. ( ) Appreciate and analyze the beauty of nature, man-made surroundings, and works of art.
l. ( ) Use the internet to collect information on trends in modern art.
m. ( ) Use multi-media to compose music
n. ( ) Able to reflect on societal concerns and environmental issues.

7. Which THREE curricular content areas are the MOST important?

(Please choose only three and prioritize your choices by using 1, 2, and 3)

a. Music theory ( )
b. Music fundamentals
Writing-by-ear ( )
Singing-by-ear ( )
Playing-by-ear ( )
Conducting ( )
Sight-singing ( )
Sight-reading ( )
c. Group Singing ( )
d. Play Instrument
Recorder ( )
Keyboard ( )
e. Composition ( )
f. ( ) Music appreciation
g. ( ) Cultivate students' interests of the fine arts
h. ( ) Differentiate various music styles
i. ( ) Participate in concerts and drama
j. ( ) Relate music with the society
k. ( ) Appreciate and analyze the beauty of nature, man-made surroundings, and works of art.
l. ( ) Use the internet to collect information on trends in modern art.
m. ( ) Use multi-media to compose music
n. ( ) Able to reflect on societal concerns and environmental issues.

8. Which THREE curricular content areas are the LEAST important?

(Please choose only three and prioritize your choices by using 1, 2, and 3)

a. Music theory ( )
b. Music fundamentals
Writing-by-ear ( )
Singing-by-ear ( )
Playing-by-ear ( )
Conducting ( )
Sight-singing ( )
Sight-reading ( )
c. Group Singing ( )
d. Play Instrument
Recorder ( )
Keyboard ( )
e. Composition ( )
f. ( ) Music appreciation
g. ( ) Cultivate students' interests of the fine arts
h. ( ) Differentiate various music styles
i. ( ) Participate in concerts and drama
j. ( ) Relate music with the society
k. ( ) Appreciate and analyze the beauty of nature, man-made surroundings, and works of art.
l. ( ) Use the internet to collect information on trends in modern art.
m. ( ) Use multi-media to compose music
n. ( ) Able to reflect on societal concerns and environmental issues.

9. This question wants to know the implementation difficulties you have experienced. Please select all that applies.

a. ( ) The administrative has not provided support for me to implement the integrated curriculum, such as scheduling and classroom arrangement.

b. ( ) I do not share a common planning time with visual arts and theater teachers.

c. ( ) I think the students fail to gain deeper musical knowledge and advance their musical skills because of curriculum integration.

d. ( ) My students have discipline problems since implementing the integrated curriculum.

e. ( ) I do not have a solid understanding of the integrated curriculum.

f. ( ) I am not used to work with teachers of other subjects for curriculum integration.

g. ( ) I think the concept and value of the integrated curriculum were not well communicated to the parents and general public.

h. ( ) I have not been properly prepared to implement the integrated curriculum.

i. ( ) I lack the team teaching experience required for the curriculum integration.

J. ( ) Student assessment is difficult within curriculum integration.

k. ( ) There is no one initiating integrated curriculum planning in my school.

l. ( ) No team leader.

m. ( ) None of above

n. ( ) Other difficulty, please explain

_____

_____

Please fill out the following information

1. Gender: _____Female _____Male

2. Age:

_____ Younger than 30 _____30-39 _____40-49

_____ 50-59 _____60

3. Education:

_____Bachelor _____ Master's _____Doctoral _____Others

4. Years of Teaching Experience:

_____0-5 _____6-10 _____11-15 _____16-20

_____21 and above

THE END OF QUESTIONNAIRE, PLEASE FOLD AND RETURN. THANK YOU!

一、此問題的設計是爲了瞭解您對【藝術與人文課程】的觀感,請您請用以下的 0 到 6 來表達你的同意程度

1.非常不同意　2.不同意　3.有一點點不同意　4.有一點點同意　5.同意　6.非常同意　0.無法決定

a. (　　)【藝術與人文課程】可以給學生廣泛而全面的藝術教育
b. (　　)【藝術與人文課程】能有效地建立學生在藝術方面的學習
c. (　　) 音樂教育應該脫離技術本位及精緻藝術所主導的教學模式
d. (　　) 我會完全遵循【藝術與人文課程】的規定來實施教學
e. (　　) 我喜歡【藝術與人文課程】實施後的音樂課教學
f. (　　) 我比較喜歡現在的【藝術與人文課程】，勝過以前的音樂課程標準

二、下列問題的設計，是爲了瞭解您的課程統整經驗，請用打勾 (√) 的方式來回答

a. 您所任教的學校,國中部總共有幾班?	1-12 班 (　　)		13-36 班 (　　)		37 班以上 (　　)		
b.您有幾年的課程統整教學經驗？	0 年 (　　)	1 年 (　　)	2 年 (　　)	3 年 (　　)	4 年 (　　)	5 年以上 (　　)	
c. 您是否曾參與設計跨不同學習領域的學校本位課程? (不倚賴課本)	沒有 (　　)		有 (　　)		不知道 (　　)		
d. 您是否曾參與設計藝術與人文領域內的課程統整? (不倚賴課本)	沒有 (　　)		有 (　　)		不知道 (　　)		
e. 您是否讀過【藝術與人文課程】中的學生能力指標	沒有 (　　)		有 (　　)		不知道 (　　)		
f. 學校有安排固定的藝術與人文教學研究會嗎？	沒有 (　　)		有,而且我有參加 (　　)		有,但是我沒有參加 (　　)		
g. 多久舉行一次藝術與人文教學研究會嗎？	沒有 (　　)	每週 (　　)	每兩週 (　　)	每月 (　　)	每兩個月 (　　)	每學期 (　　)	不固定 (　　)
i. 有甚麼原因讓您沒有參加藝術與人文教學研究會？	(　　) 我有參與領域教學研究會 沒有參加的原因: (可多重勾選) (　　) 無法配合教學研究會安排的時間 (　　) 沒有領域教學研究會 (　　) 其他原因 _____						
j. 在領域教學研究會裡你們討論些甚麼?	(　　) 我沒有參與領域教學研究會 討論甚麼事項：(可多重勾選) (　　) 報告自己的課程進度和教授內容 (　　) 互相腦力激盪教學的想法 (　　) 討論如何共同分擔教學 (　　) 互相腦力激盪有關課程統整的想法 (　　) 討論主題統整的單元 (　　) 討論如何引導學生想出自己的學習主題 (　　) 以上都不是. (　　) 其他_____						

三、下列的課程內容，在實施九年一貫課程後，您在實際的音樂教學中，教了學生多少？

1.從未涉獵　2.非常少提到　3.少提到　4.偶爾提到　5.時常提到　6.總是強調　0 無法決定

a. 樂理　(　)
b. 基本練習
　寫譜　(　)
　發聲　(　)
　音感　(　)
　節奏　(　)
　指揮　(　)
　視唱　(　)
c. 唱歌　(　)
d. 演奏樂器
　直笛　(　)
　鍵盤　(　)
e. 音樂創作　(　)
f. 音樂欣賞　(　)

四、除了以上的內容，您在音樂課時還教些甚麼？

(　) 沒有別的
(　) 有、例如

五、您認爲學生在下列課程內容的學習表現如何？

1.非常糟糕　2.不好　3.不太好　4.勉強可以接受　5.好　6.太棒了　0-無法決定

a.樂理知識　(　)
b.基本練習
　聽寫　(　)
　聽唱　(　)
　聽奏　(　)
　指揮　(　)
　視唱　(　)
　視奏　(　)
c. 唱歌　(　)
d.有演奏樂器的能力
　(　)直笛
　(　)鍵盤
e. (　)音樂創作
f. (　)欣賞音樂
g. (　)表現出對藝術的興趣
h. (　)辯別不同的藝術風格
i. (　)參與音樂會表現、劇場表演
j. (　)了解藝術與社會時代的關係
k. (　)能賞析自然美、人工美、和藝術品的美
l. (　)懂得如何用網際網路來蒐集藝術趨勢
m. (　)懂得如何運用多元媒體來作藝術創作
n. (　)關心社會議題和環境保護

六、你認爲自己的課程設計能力程度如何？

1.絕對做不到　2.非常可能做不到　3.可能做不到　4.可能做得到　5 .非常可能做得到　6.一定作得到　0-無法決定

a.樂理知識(　)
b.基本練習
　聽寫 (　)　聽唱 (　)
　聽奏 (　)　指揮 (　)
　視唱 (　)　視奏 (　)
c. 唱歌 (　)
d.有演奏樂器的能力
　直笛 (　)　鍵盤 (　)
e. 音樂創作 (　)
f. (　)欣賞音樂
g. (　)表現出對藝術的興趣
h. (　)辯別不同的藝術風格
i. (　)參與音樂會表現、劇場表演
j. (　)了解藝術與社會時代的關係
k. (　)能賞析自然美、人工美、和藝術品的美
l. (　)懂得如何用網際網路來蒐集藝術趨勢
m. (　)懂得如何運用多元媒體來作藝術創作
n. (　)關心社會議題和環境保護

七、下列那三項課程內容，您認爲最重要 (您只需要用 1 2 3 順序選出三項)

a.樂理知識(　　)
b.基本練習
　　聽寫 (　　)　聽唱 (　　)
　　聽奏 (　　)　指揮 (　　)
　　視唱 (　　)　視奏 (　　)
c.　唱歌 (　　)
d.有演奏樂器的能力
　　直笛 (　　)　鍵盤 (　　)
e.　音樂創作 (　　)
f.　(　　)欣賞音樂
g.　(　　)表現出對藝術的興趣
h.　(　　)辯別不同的藝術風格
i.　(　　)參與音樂會表現、劇場表演
j.　(　　)了解藝術與社會時代的關係
k.　(　　)能賞析自然美、人工美、和藝術品的美
l.　(　　)懂得如何用網際網路來蒐集藝術趨勢
m.　(　　)懂得如何運用多元媒體來作藝術創作
n.　(　　)關心社會議題和環境保護

八、 下列那三項課程內容，您認爲最不重要(您只需要用 1 2 3 順序選出三項)

a.樂理知識(　　)
b.基本練習
　　聽寫 (　　)　聽唱 (　　)
　　聽奏 (　　)　指揮 (　　)
　　視唱 (　　)　視奏 (　　)
c.　唱歌 (　　)
d.有演奏樂器的能力
　　直笛 (　　)　鍵盤 (　　)
e.　音樂創作 (　　)
f.　(　　)欣賞音樂
g.　(　　)表現出對藝術的興趣
h.　(　　)辯別不同的藝術風格
i.　(　　)參與音樂會表現、劇場表演
j.　(　　)了解藝術與社會時代的關係
k.　(　　)能賞析自然美、人工美、和藝術品的美
l.　(　　)懂得如何用網際網路來蒐集藝術趨勢
m.　(　　)懂得如何運用多元媒體來作藝術創作
n.　(　　)關心社會議題和環境保護

九、此題是爲了瞭解您所遇到的困難，請您用打勾 (√) 的方式選擇您曾經遇過的困難 (可以多重勾選)

a. (　　) 行政單位沒有提供我作課程統整所須要的排課配合和教室調度
b. (　　) 我和同領域的老師沒有安排教學研究會來討論如何課程統整
c. (　　) 因爲課程統整，學生音樂知識和技巧欠缺深度的學習
d. (　　) 我的學生因爲實行統整課程而有課堂秩序的問題
e. (　　) 我對課程統整的方法和概念不了解
f. (　　) 我不適應和別科老師討論如何作課程統整
g. (　　) 我認爲家長和社會大眾並不了解課程統整的意義和價值
h. (　　) 我所受的裝備不夠，去做課程統整很困難
i. (　　) 我缺乏團隊教學的經驗
j. (　　) 在統整學習下，作學生評量很困難
k. (　　) 在我的周遭沒有帶頭做課程統整的老師
l. (　　) 沒有領域召集人
l. (　　) 以上的情況我都沒有遇過
m. (　　) 其他，請說明

_____
_____

請填寫以下的基本資料

1. 性別:　_____男　_____女
2. 年齡:
　　_____ 30 歲以下　_____30-39 歲　_____40-49 歲
　　_____ 50-59 歲　_____60 歲
3. 最高學歷:　_____學士　_____碩士　_____博士　_____其他
4. 年資:
　　_____0-5 年　_____6-10 年　_____11-15 年　_____16-20 年　_____21 年以上

問卷結束，請摺疊放入回郵信封寄回，謝謝

APPENDIX C

THE RELATIONSHIP BETWEEN FIFTEEN ATTITUDINAL STATEMENTS AND ROSENBERG AND HOVLAND'S (1960) THREE ATTITUDINAL COMPONENTS FOR FIRST PRELIMINARY QUESTIONNAIRE

Attitudinal component Pair number and attitudinal statements [positive (P) and negative (N)]
Affective component Pair I: Like Statement 1: I like teaching this skill, and do not think it's a burden. (P) Statement 9: I absolutely hate seeing this included in the new curriculum. (N) Pair II: Agree Statement 2: I am happy to see that it is included the Curriculum Guidelines. (P) Statement 8: I will have a headache from teaching this. (N)
Cognitive component Pair III: Practicality Statement 5: I believe that if students are equipped with this ability, they will benefit from it long after their graduation. (P) Statement 12: Students will not need this after graduation. (N) Pair IV: Importance Statement 3: I believe it is very important to teach this skill to students. (P) Statement 10: It will not make any difference whether we teach this skill or not. (N) Pair V: Teacher Training Statement 4: I believe that teachers will improve their teaching after teaching the prepared materials.(P) Statement 11: Teachers have no access to learn this; therefore, it is impossible to teach it. (N) Pair VI: Worthy Statement 6: I believe it is worthy to spent time on this. (P) Statement 13: It is a waste of time to teach this. (N)
Behavioral component Pair VII: Action Statement 7: I will definitely spend class time on this. (P) Statement 14: I will not spend class time on it because it will fail.(N)

APPENDIX D

STATISTICS FOR FIRST PRELIMINARY QUESTIONNAIRE

Table 1

Cronbach Alpha Results for Selecting the Best Statement of the First Questionnaire

Q	Pair 1 Like		Pair 2 Agree		Pair 3 Practicality		Pair 4 Importance		Pair 6 Worthy		Pair7 Action	
	P	N	P	N	P	N	P	N	P	N	P	N
1	.892	.899*	.857*	.855	.922	.992*	.878*	.854	.878*	.855	.864	.881*
2	.931	.946*	.922	.927*	.929*	.924	.927	.929*	.929*	.924	.929*	.924
3	.958*	.956	.957*	.956	.957*	.950	.961*	.949	.943	.949*	.952*	.949
4	.910	.929*	.912*	.911	.926*	.915	.911	.913*	.922*	.918	.922*	.918
5	.950	.952*	.953*	.952	.953	.957*	.963*	.957	.948	.953*	.949	.952*
6	.965	.970*	.966	.968*	.967*	.964	.963	.963	.964	.964	.966*	.964
7	.890	.908*	.889	.908*	.898*	.897	.890	.908*	.890	.904*	.890	.903*
8	.953	.959*	.955*	.951	.955*	.951	.955	.956*	.956*	.952	.950	.952*
9	.977*	.972	.974*	.971	.976*	.975	.974*	.973	.974*	.971	.971	.971
10	.951	.959*	.958*	.948	.950	.950	.951*	.948	.951	.952*	.967*	.950
11	.968	.977*	.961*	.959	.961*	.959	.961*	.959	.965*	.959	.961*	.959
12	.992*	.990	.991*	.990	.990	.990	.991*	.990	.990	.990	.990	.990
13	.935	.950*	.937*	.936	.949*	.940	.938*	.936	.936	.936	.936	.937*
14	.981	.982*	.988*	.979	.974	.979*	.981*	.979	.981*	.979	.981*	.979

Note. * Its Cronbach's alpha value was larger than the opposite statement's; therefore this statement would be deleted based on Norusis' suggestion.
P = positive statement; N = negative statement

Table 2

Pearson Correlation Coefficient: Correlation within the Paired Statements of the First Questionnaire

Q	Pair 1 Like	Pair 2 Agree	Pair 3 Practicality	Pair 4 Importance	Pair 5 Training	Pair 6 Worthy	Pair 7 Action
1	.790	.738	.912	.606	-.216	.647	.433
2	.627	.577	.602	.158	.204	.567	.378
3	.642	.656	.542	.581	.238	.870	.888
4	.339	.772	.403	.870	.897	.380	.380
5	.804	.715	.407	.260	-.449	.823	.850
6	.520	.755	.647	1.000	.643	.829	.897
7	.333	.271	.459	.337	.291	.498	.534
8	.894	.771	.522	.288	.119	.412	.844
9	.732	.767	.694	.846	.646	.772	.897
10	.577	1.000	.611	.717	.663	.632	.511
11	.033	.750	.750	.750	.106	.579	.750
12	.877	.877	.994	.877	.395	1.000	1.000
13	.318	.569	-.039	.460	.000	.216	.334
14	.745	.503	1.000	.653	.813	.892	.892

APPENDIX E

FIRST PRELIMINARY QUESTIONNAIRE

April 2004

Dear Music Teacher:

It is a special honor to have you volunteers for my dissertation study. I am thrilled that you care about the music education in the Taiwan middle schools. This questionnaire is a part of my pilot study and will be given to a limited number of teachers. From these results, I can revise the questionnaire accordingly for later use in my main study.

Since the new Arts and Humanities Curriculum was implemented by Department of Education, you have probably experienced some changes. The new curriculum emphasizes curriculum integration: music, visual arts, and theater are integrated into the Arts and Humanities Curriculum. In addition, the new curriculum did not specify the required music materials for each grade. Instead, activities such as relating music with the other arts, relating the arts to the society and surrounding environment, and searching and improving the inner self of the student were encouraged. Music learning had changed. How would you value this change?

According to U.S. Department of Health and Human Services regulations, the Institutional Review Board at the University has required me to inform you that you have the right to stop answering the questionnaire if you feel uncomfortable. The information you provide will be used for my doctoral study only. All respondents will be kept anonymous and no attempt will be made to connect your answers with your identity. Your answer will not be made available to your school's administration. Therefore, please answer the questionnaire as honestly as possible. Your participation is greatly appreciated.

Thank you for your time in addition to your support for music education.

Sincerely,

Lingchun Lai
Doctoral Candidate, Music Education
University of North Texas, Denton, TX, USA

A. School location: City
_____Municipalities _____Cities/County municipalities
_____Urban and Rural townships _____Villages

B. School location: Region of Taiwan
_____Northern _____Midwestern _____Southern _____Eastern/islands

C. How many classes in total for grade 7^{th} to 9^{th} at your school?
_____1 to 12 _____13 to 36 _____more than 36

D. Years of experience at present school
_____less than 1 _____1 to 5 _____6 to 10 _____11 to 15
_____16-20 _____More than 20

E. AT CURRENT SCHOOL, how many years of interdisciplinary teaching do you have? _____years

F. Total number of classes you teach this semester:
_____less than 22 _____22 _____more than 22

G. Have your class periods increased or decreased after implementing the National Nine-Year Integrated Curriculum ?
_____Decreased _____No change _____Increased

H, Teaching load:
Numbers of music classes _____
Number of theater classes _____
Others, please specify_____

I. Do you belong to any one interdisciplinary teaching team? (Multiple choices)
_____None
_____Arts and Humanities (music, visual arts, or theater)
_____Others, please
specify_____

J. Do you have regular team planning time?
_____None
_____Yes, I participate
_____Yes, but I don't participate, because _____

K. Gender _____Female _____Male

L. Age
_____less than 30 _____30-39 _____40-49
_____50-59 _____ Over 60

M. Highest Degree
_____ Junior College _____Bachelor _____Master _____Doctorate

N. Major:_____

15. Suggestion(s) on this questionnaire:

1-strongly disagree	2-disagree	3-neutral	4-agree	5-strongly agree	0-I don't know

Example:

McDonald, KFC, Pizza Huts

1. I will refer them to my friends (1)
2. I like to eat in those places (5)
3. It worth to stand in a long line for ordering MacDonald's (0)

1. Music theory, Dictation, Vocal warm-up/ routines, Ear training, Rhythm practice, Sight-singing

I am satisfied with students' achievement. ( )
I like teaching this skill, and do not think it's a burden. ( )
I am happy to see that it has been included the Curriculum Guidelines. ( )
I believe it is very important to teach this skill to the students. ( )
I believe that teachers will improve their teaching after teaching the prepared materials ( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation. ( )
I believe it is worthy to spent time on this. ( )
I will definitely spend class time on this. ( )
I will have a headache from teaching this. ( )
I would absolutely hate seeing this included in the new curriculum. ( )
I think it will not make any difference whether we teach this skill or not. ( )
I think teachers have no access to learn this; therefore, it is impossible to teach it. ( )
I think students will not need this after graduation. ( )
I think it is a waste of time to teach this. ( )
I will not spend class time on it ( )

2. Group Singing

I am satisfied with students' achievement. ( )
I like teaching this skill, and do not think it's a burden. ( )
I am happy to see that it has been included the Curriculum Guidelines. ( )
I believe it is very important to teach this skill to the students. ( )
I believe that teachers will improve their teaching after teaching the prepared materials ( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation. ( )
I believe it is worthy to spent time on this. ( )
I will definitely spend class time on this. ( )
I will have a headache from teaching this. ( )
I would absolutely hate seeing this included in the new curriculum. ( )
I think it will not make any difference whether we teach this skill or not. ( )
I think teachers have no access to learn this; therefore, it is impossible to teach it. ( )
I think students will not need this after graduation. ( )
I think it is a waste of time to teach this. ( )
I will not spend class time on it ( )

1-strongly disagree	2-disagree	3-neutral	4-agree	5-strongly agree	0-I don't know

3. Conducting

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

4. Recorder playing

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

1-strongly disagree	2-disagree	3-neutral	4-agree	5-strongly agree	0-I don't know

5. Keyboard playing

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

6. Develop interests and hobbies toward art performance and art appreciation and select an art activity that corresponds with his/her personality, interest, and ability, and to pursue it.

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

1-strongly disagree	2-disagree	3-neutral	4-agree	5-strongly agree	0-I don't know

7. Using suitable resources and techniques from music, art, and theater, to express feelings and values, to observe and sense peoples' feelings and responses, to develop the capacity for expressing one's uniqueness.

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

8. Using multi-media to create works of art which can be used in everyday life.

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

1-strongly disagree	2-disagree	3-neutral	4-agree	5-strongly agree	0-I don't know

9. Using organized concerts, theater performances, and art shows to help students cultivate initiative, cooperation, mutual respect, self-discipline, communication, and leadership.

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

10. Nurture ability for independent and analytical thinking; to appreciate and analyze the beauty in nature, man-made surroundings, and works of art; and to distinguish and describe the content, forms, and characteristics of various forms of art.

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

1-strongly disagree	2-disagree	3-neutral	4-agree	5-strongly agree	0-I don't know

11. To explore the stylistic differences between classical and modern arts, between popular and elite arts, and between traditional (i.e. Western classical music, Chinese opera, etc.) and non-traditional (rap, body painting, etc.) arts

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

12. Understanding the lifestyle and values of people and an original work of arts from different historical periods and cultural orientation

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

1-strongly disagree	2-disagree	3-neutral	4-agree	5-strongly agree	0-I don't know

13. Using modern technology (such as internet) to collect art-related information from around the world to understand trends of modern arts and to learn about other cultures.

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

14. Reflect societal concerns (i.e. child abuse, domestic violence, drug, gangs, etc.) and environmental issues. (i.e. air pollution, recycling, protecting endangered species, etc.)

I am satisfied with students' achievement.	( )
I like teaching this skill, and do not think it's a burden.	( )
I am happy to see that it has been included the Curriculum Guidelines.	( )
I believe it is very important to teach this skill to the students.	( )
I believe that teachers will improve their teaching after teaching the prepared materials	( )
I believe that if students are equipped with this ability, they will benefit from it long after their graduation.	( )
I believe it is worthy to spent time on this.	( )
I will definitely spend class time on this.	( )
I will have a headache from teaching this.	( )
I would absolutely hate seeing this included in the new curriculum.	( )
I think it will not make any difference whether we teach this skill or not.	( )
I think teachers have no access to learn this; therefore, it is impossible to teach it.	( )
I think students will not need this after graduation.	( )
I think it is a waste of time to teach this.	( )
I will not spend class time on it	( )

1-strongly disagree	2-disagree	3-neutral	4-agree	5-strongly agree	0-I don't know

Example:

1. (1) I will refer others to eat in MacDonald's
2. (5) I like to eat in MacDonald's
3. (0) It worth to stand in a long line for ordering MacDonald's

15. ( ) If a fellow teacher has enthusiastically implemented the integrated curriculum, and has brought at least one other teacher on board to further develop the integrated curriculum, then I am willing to implement it.
16. ( ) The administration has provided support for me to implement the integrated curriculum.
17. ( ) I do not share a common planning time with other teachers.
18. ( ) I think students will lose the opportunity to learn important musical knowledge and skills in an integrated curriculum.
19. ( ) I feel pressured to cover the required materials.
20. ( ) My students have discipline problems since implementing the integrated curriculum.
21. ( ) I do not have a solid understanding of the integrated curriculum.
22. ( ) I am uncomfortable with non-music teachers teaching music in their classrooms.
23. ( ) I think the concept and value of the integrated curriculum were not well communicated to the parents and general public.
24. ( ) I have been properly prepared to implement the integrated curriculum.
25. ( ) I lack the team teaching experience required for the integrated curriculum.
26. ( ) It is difficult for me personally to assess and evaluate the student's learning in an integrated curriculum setting.

Example:

Prioritize three places you choose not to dine in when you do not have enough money

MacDonald's	(2)	KFC	( )	Pizza Huts	(3)
Breakfast store	( )	Hyatt	(1)	Driving Catering Service	( )

27. Prioritize three materials that you will choose not to teach first when time is restrained and limited.

Music theory	( )	Vocal warm-up/ routines	( )	Ear training	( )
Sight-singing	( )	Rhythmic practice	( )	Dictation	( )
Conducting	( )	Group Singing	( )	Recorder playing	( )
Keyboard playing	( )	Composition	( )	Music appreciation	( )

28. Prioritize three materials that you will choose to teach first when time is restrained and limited.

Music theory	( )	Vocal warm-up/ routines	( )	Ear training	( )
Sight-singing	( )	Rhythmic practice	( )	Dictation	( )
Conducting	( )	Group Singing	( )	Recorder playing	( )
Keyboard playing	( )	Composition	( )	Music appreciation	( )

親愛的音樂老師

我很榮幸知道您願意參與我的博士論文研究，也很興奮得知您很關心在台灣的國中音樂教育。這份問卷調查是個實驗性的問卷調查，意思是說，通過它我可以在正式問卷調查之前，先給一部份的老師做過，之後我可以修改，再用在我的正式研究上。

自從【藝術與人文】實施以來，您必然是體驗了一些改變。新課程強調課程統整，音樂、美術、和表演藝術統整成爲【藝術與人文】，在課程綱要中，不再細訂每一個年級必須要學到的音樂技能和知識，相反的，新課程鼓勵將音樂與其他藝術聯合，將藝術與社會環境結合，探索自我和充實自我等等的學習和活動，音樂的學習已經變了，您如何看待這個變化？

跟據美國健康人事部的規定，北德州大學的調查委員會需要我知會每一位回答問卷者，『您有權可以在回答問卷中途決定不繼續回答問卷。』您所提供的資料只會用在我的論文研究，不計名，我也不會將您的個人回答告知學校當局，所以請誠實作答，很感謝您的參與。

謝謝您的時間和對音樂教育的支持！祝福您！

賴玲君
北德州大學音樂教育博士候選人
四月, 2004

A. 學校所在城市
_____直轄市 _____省轄市/縣轄市 _____鄉鎮 _____村

B. 學校所在地區
_____北部 _____中部 _____南部 _____東部/離島

C. 您現在服務的學校的國中部有幾個班級？
_____ 1- 12 班 _____ 13-36 班 _____36 班以上

D. 您教幾年國中？
_____ 不到 1 年 _____ 1-5 年 _____ 6-10 年 _____ 11-15 年
_____ 16-20 年 _____ 21 年以上

E. 在現在服務的學校，您有幾年的課程統整教學經驗？ _____年

F. 這個學期您的授課總數有幾堂
_____少於 22 堂 _____22 堂 _____多於 22 堂

G. 在九年一貫新課程實行後，您的授課數有何變化？
_____減少 _____沒有變化 _____增加

H. 這個學期，您的授課數
音樂課有_____堂
表演藝術課有_____堂
若有其它科目,請列舉_____

I. 您有屬於任何一個課程統整的教學團隊嗎？(可複選)
_____ 沒有
_____ 藝術與人文領域:音樂
_____ 藝術與人文領域:美術
_____ 藝術與人文領域:表演藝術
_____ 和其它學習領域合作， 請列舉科目 _____

J. 您所屬的教學團隊有固定的開會時間嗎？
_____ 沒有
_____ 有，而且我有參加
_____ 有，但是我沒有參加，因爲_____

K. 性別 _____女 _____男

L. 年齡
_____ 30 歲以下 _____30-39 歲 _____40-49 歲
_____ 50-59 歲 _____60 歲以上

M. 最高學歷 _____ 專科 _____大學 _____碩士 _____博士

N. 主修_____

請寫下任何你對這份問卷的建議

1 非常不同意	2 不同意	3 中立	4 同意	5 非常同意	0 不知道

範例

麥當勞,肯塔基,百勝客

1. 我會介紹別人去吃 (1)
2. 我喜歡吃 (5)
3. 就算要排隊也值得 (0)

1. 樂理,寫譜練習,發聲練習,音感練習,節奏練習,視唱練習

我很滿意學生在這些方面的學習成果	( )
我喜歡教，而且一點都不覺得教這個是種負擔	( )
教育當局將它列入課程標準中令我十分雀躍	( )
我相信此項教學很重要	( )
我相信老師在教學後會增加自己的知識	( )
我相信學生若具備這項能力，他畢業後一定用得到的	( )
我相信花時間教是應該的	( )
我絕對會花時間教	( )
我一想到要教，我就頭大	( )
我一點都不樂意見到新的課程標準有它	( )
我認爲有沒有教這個都無關緊要	( )
我認爲老師實在沒有管道去學，更何況去教	( )
我認爲學生畢業後不會用到它的	( )
我認爲教這個簡直是浪費時間	( )
我絕對不會花時間教	( )

2. 唱歌

我很滿意學生在這些方面的學習成果	( )
我喜歡教，而且一點都不覺得教這個是種負擔	( )
教育當局將它列入課程標準中令我十分雀躍	( )
我相信此項教學很重要	( )
我相信老師在教學後會增加自己的知識	( )
我相信學生若具備這項能力，他畢業後一定用得到的	( )
我相信花時間教是應該的	( )
我絕對會花時間教	( )
我一想到要教，我就頭大	( )
我一點都不樂意見到新的課程標準有它	( )
我認爲有沒有教這個都無關緊要	( )
我認爲老師實在沒有管道去學，更何況去教	( )
我認爲學生畢業後不會用到它的	( )
我認爲教這個簡直是浪費時間	( )
我絕對不會花時間教	( )

1 非常不同意	2 不同意	3 中立	4 同意	5 非常同意	0 不知道

3. 指揮

我很滿意學生在這些方面的學習成果	( )
我喜歡教，而且一點都不覺得教這個是種負擔	( )
教育當局將它列入課程標準中令我十分雀躍	( )
我相信此項教學很重要	( )
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我相信花時間教是應該的	( )
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我認爲老師實在沒有管道去學，更何況去教	( )
我認爲學生畢業後不會用到它的	( )
我認爲教這個簡直是浪費時間	( )
我絕對不會花時間教	( )

4. 直笛吹奏

我很滿意學生在這些方面的學習成果	( )
我喜歡教，而且一點都不覺得教這個是種負擔	( )
教育當局將它列入課程標準中令我十分雀躍	( )
我相信此項教學很重要	( )
我相信老師在教學後會增加自己的知識	( )
我相信學生若具備這項能力，他畢業後一定用得到的	( )
我相信花時間教是應該的	( )
我絕對會花時間教	( )
我一想到要教，我就頭大	( )
我一點都不樂意見到新的課程標準有它	( )
我認爲有沒有教這個都無關緊要	( )
我認爲老師實在沒有管道去學，更何況去教	( )
我認爲學生畢業後不會用到它的	( )
我認爲教這個簡直是浪費時間	( )
我絕對不會花時間教	( )

1 非常不同意	2 不同意	3 中立	4 同意	5 非常同意	0 不知道

5. 彈奏鍵盤樂器

我很滿意學生在這些方面的學習成果	( )
我喜歡教，而且一點都不覺得教這個是種負擔	( )
教育當局將它列入課程標準中令我十分雀躍	( )
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我相信花時間教是應該的	( )
我絕對會花時間教	( )
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我認爲學生畢業後不會用到它的	( )
我認爲教這個簡直是浪費時間	( )
我絕對不會花時間教	( )

6. 養成日常生活中藝術表現與欣賞的興趣與習慣,選擇適合自己的性向、興趣、與能力的藝術活動，並能繼續學習

我很滿意學生在這些方面的學習成果	( )
我喜歡教，而且一點都不覺得教這個是種負擔	( )
教育當局將它列入課程標準中令我十分雀躍	( )
我相信此項教學很重要	( )
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我相信花時間教是應該的	( )
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我認爲學生畢業後不會用到它的	( )
我認爲教這個簡直是浪費時間	( )
我絕對不會花時間教	( )

1 非常不同意	2 不同意	3 中立	4 同意	5 非常同意	0 不知道

7. 藉由聆賞、觀賞、或表演藝術作品（例如音樂會、劇場表演、畫展等等），來展現獨特的表現能力，體察人群間各種情感和反應，表達情感和價值觀

我很滿意學生在這些方面的學習成果 ( )
我喜歡教，而且一點都不覺得教這個是種負擔 ( )
教育當局將它列入課程標準中令我十分雀躍 ( )
我相信此項教學很重要 ( )
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我認爲學生畢業後不會用到它的 ( )
我認爲教這個簡直是浪費時間 ( )
我絕對不會花時間教 ( )

8. 運用多元媒體，製作藝術作品，並能運用在日常生活上

我很滿意學生在這些方面的學習成果 ( )
我喜歡教，而且一點都不覺得教這個是種負擔 ( )
教育當局將它列入課程標準中令我十分雀躍 ( )
我相信此項教學很重要 ( )
我相信老師在教學後會增加自己的知識 ( )
我相信學生若具備這項能力，他畢業後一定用得到的 ( )
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我認爲學生畢業後不會用到它的 ( )
我認爲教這個簡直是浪費時間 ( )
我絕對不會花時間教 ( )

1 非常不同意	2 不同意	3 中立	4 同意	5 非常同意	0 不知道

9. 透過有計畫的音樂會、劇場或畫展, 幫助學生學習主動、合作、尊重、秩序、溝通、協調的團隊精神

我很滿意學生在這些方面的學習成果	( )
我喜歡教，而且一點都不覺得教這個是種負擔	( )
教育當局將它列入課程標準中令我十分雀躍	( )
我相信此項教學很重要	( )
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我相信學生若具備這項能力，他畢業後一定用得到的	( )
我相信花時間教是應該的	( )
我絕對會花時間教	( )
我一想到要教，我就頭大	( )
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我認爲有沒有教這個都無關緊要	( )
我認爲老師實在沒有管道去學，更何況去教	( )
我認爲學生畢業後不會用到它的	( )
我認爲教這個簡直是浪費時間	( )
我絕對不會花時間教	( )

10.辨識及描述各種藝術品的內容、形式、與特性, 欣賞和分析自然、人工、和藝術品的美,並發展獨立思考分析的能力

我很滿意學生在這些方面的學習成果	( )
我喜歡教，而且一點都不覺得教這個是種負擔	( )
教育當局將它列入課程標準中令我十分雀躍	( )
我相信此項教學很重要	( )
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我認爲學生畢業後不會用到它的	( )
我認爲教這個簡直是浪費時間	( )
我絕對不會花時間教	( )

1 非常不同意	2 不同意	3 中立	4 同意	5 非常同意	0 不知道

11. 感受及辨別古典藝術與當代藝術，精緻藝術與大眾藝術，傳統藝術（例如西洋古典音樂、中國國劇）與非傳統藝術（例如陳達民間說唱、人體彩繪）風格的差異

我很滿意學生在這些方面的學習成果 ( )
我喜歡教，而且一點都不覺得教這個是種負擔 ( )
教育當局將它列入課程標準中令我十分雀躍 ( )
我相信此項教學很重要 ( )
我相信老師在教學後會增加自己的知識 ( )
我相信學生若具備這項能力，他畢業後一定用得到的 ( )
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我認爲有沒有教這個都無關緊要 ( )
我認爲老師實在沒有管道去學，更何況去教 ( )
我認爲學生畢業後不會用到它的 ( )
我認爲教這個簡直是浪費時間 ( )
我絕對不會花時間教 ( )

12. 不同時代，不同社會的藝術生活、價值觀、和藝術創作

我很滿意學生在這些方面的學習成果 ( )
我喜歡教，而且一點都不覺得教這個是種負擔 ( )
教育當局將它列入課程標準中令我十分雀躍 ( )
我相信此項教學很重要 ( )
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我認爲教這個簡直是浪費時間 ( )
我絕對不會花時間教 ( )

1 非常不同意	2 不同意	3 中立	4 同意	5 非常同意	0 不知道

13. 運用資訊科技（例如網際網路）,蒐集中外藝術資料,了解當代藝術生活趨勢,增廣對文化的認知範圍

我很滿意學生在這些方面的學習成果	( )
我喜歡教，而且一點都不覺得教這個是種負擔	( )
教育當局將它列入課程標準中令我十分雀躍	( )
我相信此項教學很重要	( )
我相信老師在教學後會增加自己的知識	( )
我相信學生若具備這項能力，他畢業後一定用得到的	( )
我相信花時間教是應該的	( )
我絕對會花時間教	( )
我一想到要教，我就頭大	( )
我一點都不樂意見到新的課程標準有它	( )
我認爲有沒有教這個都無關緊要	( )
我認爲老師實在沒有管道去學，更何況去教	( )
我認爲學生畢業後不會用到它的	( )
我認爲教這個簡直是浪費時間	( )
我絕對不會花時間教	( )

14. 社會關懷（例如兒童虐待、家庭暴力、吸毒、幫派）和環境保護的議題（例如空氣污染、資源回收、保護瀕臨絕種生物）

我很滿意學生在這些方面的學習成果	( )
我喜歡教，而且一點都不覺得教這個是種負擔	( )
教育當局將它列入課程標準中令我十分雀躍	( )
我相信此項教學很重要	( )
我相信老師在教學後會增加自己的知識	( )
我相信學生若具備這項能力，他畢業後一定用得到的	( )
我相信花時間教是應該的	( )
我絕對會花時間教	( )
我一想到要教，我就頭大	( )
我一點都不樂意見到新的課程標準有它	( )
我認爲有沒有教這個都無關緊要	( )
我認爲老師實在沒有管道去學，更何況去教	( )
我認爲學生畢業後不會用到它的	( )
我認爲教這個簡直是浪費時間	( )
我絕對不會花時間教	( )

1 非常不同意　　2 不同意　　3 中立　　4 同意　　5 非常同意　　0 不知道

範例

1. (1)我會介紹別人去吃麥當勞
2. (5)我喜歡吃麥當勞
3. (0)就算要排隊去吃麥當勞也值得

15.(　　)如果在我的同事中有人很積極地在作課程統整,而且至少帶領另一位老師成爲發展課程統整的夥伴,我也會跟隨他作課程統整

16.(　　)行政單位有提供我作課程統整所須要的支持

17.(　　)我和其他老師沒有共同課程計劃時間

18.(　　)我認爲因爲課程統整學生會失去學習重要的音樂知識和技巧的機會

19.(　　)我有壓力去要教必須教授的教材

20.(　　)我的學生因爲實行課程統整而有課堂秩序的問題

21.(　　)我對課程統整不甚了解

22.(　　)我對別科老師在他的課堂中教有關音樂的部份不放心

23.(　　)我認爲課程統整的觀念和價值不是很充分的讓家長和社會大眾了解

24.(　　)我已經被裝備好去教統整課程

25.(　　)我缺乏團隊教學的經驗

26.(　　)在統整學習下,我很困難作學生評量

範例

下列那三個地方在錢不夠時我會選擇不去吃

麥當勞	(2)	肯塔基	(　)	百勝客	(3)
美以美早餐店	(　)	凱悅飯店的餐廳	(1)	我家巷口的麵攤	(　)

27. 下列那三項教學在教學時間不夠時我會選擇不教

樂理	(　)	發聲練習	(　)	音感練習	(　)	視唱練習	(　)
節奏練習	(　)	寫譜練習	(　)	指揮	(　)	歌唱	(　)
直笛吹奏	(　)	彈奏鍵盤樂器	(　)	音樂創作	(　)	音樂欣賞	(　)

28. 下列那三項教學在教學時間不夠時我會選擇先教

樂理	(　)	發聲練習	(　)	音感練習	(　)	視唱練習	(　)
節奏練習	(　)	寫譜練習	(　)	指揮	(　)	歌唱	(　)
直笛吹奏	(　)	彈奏鍵盤樂器	(　)	音樂創作	(　)	音樂欣賞	(　)

APPENDIX F

SECOND PRELIMINARY QUESTIONNAIRE

Dear Music Teacher,

Thank you for your taking time out of your busy schedule last April to fill out the questionnaire for my dissertation study. After analyzing the responses you and the other teachers provided, I can say with certainty that having you in music education is a blessing to students indeed.

The first questionnaire you filled out was part of my pilot study and only given to a limited number of teachers. I had hoped to incorporate these results and revise the questionnaire accordingly for future use in my main study. However, after discussing with my advisor, we agreed that a second questionnaire is necessary to be given to you. Your responses in this second questionnaire are crucial to my dissertation study.

Based on the regulations set by the U.S. Department of Health and Human Services, the Institutional Review Board at the University states that you have the right to stop answering the questionnaire if you feel uncomfortable. The information you provide will be used for my doctoral study only. All respondents will be kept anonymous and no attempt will be made to connect your answers with your identity. Your answers will not be made available to your school's administration. Therefore, please answer the questionnaire as honestly as possible. Your participation is greatly appreciated.

Thank you for your time in addition to your support for music education.

Sincerely,

Lingchun Lai
Doctoral Candidate, Music Education
University of North Texas, Denton, TX, USA
July, 2004

Starting time: _____, End Time: _____

1. Gender: _____Female _____Male
2. Age:
   _____ Below 30 _____30-39 _____40-49 _____ 50-59 _____60 and up
3. Highest Degree Earned:
   _____ Junior College _____Bachelor's _____Master's _____Doctorate
4. College Major: _____
5. How many 7^{th}-9^{th} grade classes at your present school?
   _____ 1-12, _____ 13-36, _____ 37 and above
6. Publisher(s) of music textbooks used in your music class: _____

Experience in Curriculum Integration

(Curriculum Integration: Two or more teachers of different subjects (1) adjust the sequence of syllabus, teach related topics and concepts at the same time; or (2) design lesson plans to coordinate the related topics within two subjects; or (3) design lesson plans and syllabus to coordinate themes selected by teachers.)

How many years have you taught 7^{th} to 9^{th} graders?	Less than 1 ( )	1-5 ( )	6-10 ( )	11-15 ( )	16-20 ( )	21 and Above ( )
How many years have you applied the concept of curriculum integration to your teaching ?	0 ( )	1 ( )	2 ( )	3 ( )	4 ( )	5 and Above ( )
Do you belong to any teams involved in curriculum integration?	None ( )		Arts and Humanities (Music, Visual Arts, Theater) ( )		Other Learning Areas or Subject _____	
If you belong to a team, does your team have a regular common planning time ?	None ( )		Yes, I attend ( )		Yes, but I do not attend ( )	
Why don't you attend these common planning meetings?	Reason:					

Teaching Load

How many class periods are you teaching this semester?	Less than 22 ( )		22 ( )		More than 22 ( )	
How many class periods do you have for the following subjects?	Music _____	Visual Arts _____	Theater _____	Other Subjects _____	Counselor ( )	Administrative Office ( )

1- Not at all

2- Seldom. If at all, only once or twice per semester, with minimal coverage

3- Half of the classes it is taught but only the main points, not in depth

4- Often. Most of the content area is taught

5- Always. The content area is taught systematically and in detailed

0- I do not know.

Example: How thoroughly will you coach your new nanny in the following?

a. (1) Giving a Bath b. (5) Changing a Diaper c. (2) Feeding

(Sample reasoning: I choose (1) for question 1 because I do not allow the nanny to bathe my baby; I choose (5) for question 2 because changing diapers is important and I want her to change them my way; and because I only mentioned to her what to feed the baby, I choose (2) for question 3.)

1. How thoroughly do you teach the following musical content areas with the Arts and Humanities Curriculum?

a. Music Theory ( )

b. Music Fundamentals

- Notation ( )
- Vocal Warm-up ( )
- Ear Training ( )
- Rhythmic Practice ( )
- Conducting ( )
- Sight-singing ( )

c. Group Singing ( )

d. Instrument

- Recorder ( )
- Keyboard ( )

e. Composing ( )

f. Music Appreciation ( )

1- Very Dissatisfied

2- Dissatisfied

3- Neutral

4- Satisfied

5- Very Satisfied

0-I don't know

Example:

To what extent are you satisfied with your nanny's performance in the following categories?

a. (0) Bathing b. (5) Diaper changing c. (2) Feeding

(Sample Reasoning：Because I do not allow the nanny to bathe my baby, I choose (0—Undecided) for question 1; She does an excellent job in changing my baby's diapers, so I pick (5—very satisfied) for question 2; and I choose (2) for question 3 because I have seen her be impatient and at times will force the baby to eat.)

2. To what extent are you satisfied with your students' performance in the following content areas?

a. Music Theory ( )

b. Music Fundamentals

Notation ( )

Vocal Warm-up ( )

Ear Training ( )

Rhythmic Practice ( )

Conducting ( )

Sight-singing ( )

c. Group Singing ( )

d. Instrument

Recorder ( )

Keyboard ( )

e. ( ) Music Composing

f. ( ) Music Appreciation

g. ( ) Cultivating music interests

h. ( ) Able to participate in concerts and drama

i. ( ) Able to relate music with the society

j. ( ) Able to differentiate various music styles

k. ( ) Appreciate and analyze the beauty of nature, man-made surroundings, and works of art.

l. ( ) Use the internet to collect information on trends in modern art.

m. ( ) Use multi-media to compose music

n. ( ) Able to reflect on societal concerns and environmental issues.

1-Absolutely not	2-Probably not	3-Neutral	4-Probably	5-Absolutely

0-I do not know

Example: How well can you predict that your nanny can do the following techniques?

a. (1) Bath b. (5) Diaper change c. (4) Feeding

(Sample Reasoning: Since I asked her not to give my baby a bath, I choose (1—absolutely not) for Bath; Because I have taught her to change a diaper many times, I know she can do it well, so I choose (5—absolutely) for Diaper Change; she has experience from raising her own children, so I choose (4—probably) for Feeding)

3. Are the following content areas appropriate for today's classroom?

a. ( ) Able to cultivate music interests

b. ( ) Able to participate in concerts and dramas

c. ( ) Able to relate music with the society

d. ( ) Able to differentiate various music styles

e. ( ) Able to appreciate and analyze the beauty in nature , man-made surroundings, and works of art.

f. ( ) Able to use technology (such as internet) to collect information on trends in modern art.

g. ( ) Able to use multi-media to compose music

h. ( ) Able to reflect on societal concerns and environmental issues.

4. How well do you perceive yourself as being capable of developing curriculum to include the following content areas?

a. Able to apply music theory ( )

b. Able to apply music fundamentals

Notation ( )

Vocal Warm-up ( )

Ear Training ( )

Rhythmic Practice ( )

Conducting ( )

Sight-singing ( )

c. Able to sing ( )

d. Able to play Instrument

Recorder ( )

Keyboard ( )

e. Able to compose ( )

f. ( ) Able to appreciate music

g. ( ) Able to cultivate musical interests

h. ( ) Able to participate in concerts and drama

i. ( ) Able to relate music with the society

j. ( ) Able to differentiate various music styles

k. ( ) Appreciate and analyze the beauty of nature, man-made surroundings, and works of art.

l. ( ) Use the internet to collect information on trends in modern art.

m. ( ) Use multi-media to compose music

n. ( ) Able to reflect on societal concerns and environmental issues.

Example

Prioritize three places that you will NOT eat at if you do not have enough money.

McDonald's	(2)	KFC	( )	Pizza Hut	(3)
Breakfast Shop	( )	Hyatt Hotel restaurant	(1)	Street Vendors	( )

(Sample Reasoning：Hyatt is my first choice because I will not go there as it costs too much; McDonald's is my second choice because McDonald's is not that cheap, and it is high in fat content; Pizza Hut is my third choice because I am allergic to cheese.)

5. If class time is limited, which three content areas will you consider NOT to include? (prioritize your choices by using 1, 2, and 3)

a. Able to apply music theory ( )

b. Able to apply music fundamentals

- Notation ( )
- Vocal Warm-up ( )
- Ear Training ( )
- Rhythmic Practice ( )
- Conducting ( )
- Sight-singing ( )

c. Able to sing ( )

d. Able to play Instrument

- Recorder ( )
- Keyboard ( )

e. Able to compose ( )

f. ( ) Able to appreciate music

g. ( ) Able to cultivate musical interests

h. ( ) Able to participate in concerts and drama

i. ( ) Able to relate music with the society

j. ( ) Able to differentiate various music styles

k. ( ) Appreciate and analyze the beauty of nature, man-made surroundings, and works of art.

l. ( ) Use the internet to collect information on trends in modern art.

m. ( ) Use multi-media to compose music

n. ( ) Able to reflect on societal concerns and environmental issues.

6. If class time is limited, which three content areas will you consider to include? (prioritize your choices by using 1, 2, and 3)

a. Able to apply music theory ( )

b. Able to apply music fundamentals

- Notation ( )
- Vocal Warm-up ( )
- Ear Training ( )
- Rhythmic Practice ( )
- Conducting ( )
- Sight-singing ( )

c. Able to sing ( )

d. Able to play Instrument

- Recorder ( )
- Keyboard ( )

e. ( )Able to compose

f. ( ) Able to appreciate music

g. ( ) Able to cultivate musical interests

h. ( ) Able to participate in concerts and drama

i. ( ) Able to relate music with the society

j. ( ) Able to differentiate various music styles

k. ( ) Appreciate and analyze the beauty of nature, man-made surroundings, and works of art.

l. ( ) Use the internet to collect information on trends in modern art.

m. ( ) Use multi-media to compose music

n. ( ) Able to reflect on societal concerns and environmental issues.

1Totally disagree	2Disagree	3Neutral	4Agree	5Totally agree

0-I do not know

Example:
1. (5) I like to eat at McDonald's 2. (1) I will recommend/encourage others to eat at McDonald's
3. (3) It is worth standing in a long line to eat at McDonald's
(Sample Reasoning: I love McDonald's fries, so I choose (5) for question 1. Because McDonald's is high in fat and bad for our health, I choose (1) for question 2. While I do not like to stand in a long line if I am in a hurry, I will do so if they give me my favorite Hello Kitty toy with my happy meal order; therefore, I choose (3) for question 3.)

7. Please indicate your level of agreement for the following statements

a. ( ) If a fellow teacher has enthusiastically implemented the integrated curriculum, and has brought at least one other teacher on board to further develop the integrated curriculum, then I am willing to implement it.

b. ( ) The administration has not provided support for me to implement the integrated curriculum.

c. ( ) I do not share a common planning time with other teachers.

d. ( ) I think students will lose the opportunity to learn important musical knowledge and skills in an integrated curriculum.

e. ( ) I feel pressured to cover the required materials.

f. ( ) My students have discipline problems since implementing the integrated curriculum.

g. ( ) I do not have a solid understanding of the integrated curriculum.

h. ( ) I am uncomfortable with non-music teachers teaching music in their classrooms.

i. ( ) I think the concept and value of the integrated curriculum were not well communicated to the parents and general public.

j. ( ) I have not been properly prepared to implement the integrated curriculum.

k. ( ) I lack the team teaching experience required for the integrated curriculum.

l. ( ) It is difficult for me personally to assess and evaluate the student's learning in an integrated curriculum setting.

Please return to the first page, and record the time you finished this questionnaire

1. Compared with the previous questionnaire you answered in April, are the questions here clearer than the previous one ? ( )Yes ( )No

2. Was the length of this questionnaire too long and/or did you become impatient while filling it out?
( )Yes ( )No

3. Do you have any suggestion to improve the quality of the questionnaire?
( )None, ( )Yes, _____

親愛的音樂老師

很謝謝您在四月底時在百忙中抽空回答了我的問卷，我分析了您和其他參與的老師的答案後，我更能肯定，有您們在音樂教育的教學行列中，是一件多麼寶貴的事。

正如我以前所提過，前份問卷是個實驗性的問卷調查，意思是說，通過它我可以在正式問卷調查之前，先給一部份的老師做過，之後我可以修改，再用在我的正式研究上，上回的問卷結果，經過我與我的指導教授討論過後，經過修改，我們決定在正式問卷之前，有必要再做第二次實驗性的問卷調查，因爲您曾參與我的第一次實驗性的問卷調查，您的意見更是對我難以言喻的重要。

跟據美國健康人事部的規定，北德州大學的調查委員會需要我知會每一位回答問卷者，『您有權可以在回答問卷中途決定不繼續回答問卷。』您所提供的資料只會用在我的論文研究，不計名，我也不會將您的個人回答告知學校當局，所以請誠實作答，很感謝您的參與。

謝謝您的時間和對音樂教育的支持！祝福您！

賴玲君

北德州大學音樂教育博士候選人

七月, 2004

請記下開始做答時間_____，結束做答時間_____。

1. 性別 _____女 _____男
2. 年齡
   _____ 30 歲以下 _____30-39 歲 _____40-49 歲
   _____ 50-59 歲 _____60 歲以上
3. 最高學歷 _____ 專科 _____大學 _____碩士 _____博士
4. 大學主修_____
5. 您所任教的學校,國中部有幾班? _____ 1-12 班, _____ 13-36 班, _____ 37 班以上
6. 音樂課的教科書的出版社_____

課程統整教學經驗

(備註：課程統整是指兩個或以上的科目老師(1)調整課程進度的次序，將相關的觀念在同一時間教，或是(2)針對兩科共有的重疊觀念，重新設計教學計劃單，或是(3)根據選定的一個主題，重新設計教學計劃單和課程進度。)

您教了幾年國中？	不到 1 年 ( )	1-5 年 ( )	6-10 年 ( )	11-15 年 ( )	16-20 年 ( )	21 年以上 ( )
在現在服務的學校，您有幾年的課程統整教學經驗？	0 年 ( )	1 年 ( )	2 年 ( )	3 年 ( )	4 年 ( )	5 年以上 ( )
您有屬於任何一個課程統整的教學團隊嗎？	沒有 ( )		藝術與人文領域 ( )		其它領域或科目 _____	
您所屬的課程統整的教學團隊有固定的共同計畫時間嗎？	沒有 ( )		有,而且我有參加 ( )		有,但是我沒有參加 ( )	
有甚麼原因讓您沒有參加共同計畫時間？	原因:					

教學工作量

這個學期您的授課總數有幾堂	少於 22 堂 ( )		22 堂 ( )		多於 22 堂 ( )	
這個學期，您的每科授課數各有幾堂	音樂 _____堂	美術 _____堂	表演藝術 _____堂	其他科目 _____課 _____堂	導師 (勾選) ( )	行政工作 (勾選) ( )

1-完全沒教
2-不常在教，若有教也只有每學期教一兩次，而且只有淺淺帶過
3-十次上課中有五次會到，但是只有重點式教，沒有深入
4-常常在教，大部份內容都有教
5-總是在教，教得很有系統，很仔細
0-不知道

範例 針對下列的育嬰技巧，你教新菲傭有多仔細
1. (1)洗澡　　2. (5)換尿布　　3. (2)餵食
(思考：我不要菲傭幫孩子洗澡，所以第一題我選擇(1)完全沒教，我認爲換尿布是很重要的，所以第二題我選擇(5)，希望她能照著我的方法做，在餵食方面我大概教過一次吧，所以第三題我選擇(2)。)

一. 下列的音樂課程內容，在"藝術與人文"課程實施後，您在音樂課中涵蓋多少
a. 樂理　　(　　)
b. 基本練習
　寫譜　　(　　)
　發聲　　(　　)
　音感　　(　　)
　節奏　　(　　)
　指揮　　(　　)
　視唱　　(　　)
c. 唱歌　　(　　)
d. 演奏樂器
　直笛　　(　　)
　鍵盤　　(　　)
e. 音樂創作　　(　　)
f. 音樂欣賞　　(　　)

1-非常不滿意　　2-不滿意　　3-普通　　4-滿意　　5-非常滿意　　0-無法決定

範例 針對下列的育嬰技巧，你對新菲傭的表現有多滿意
1. (0)洗澡　　2. (5)換尿布　　3. (2)餵食
(思考：我不要菲傭幫孩子洗澡,所以第一題我選擇(0)無法決定;她換尿布的技術非常好,所以第二題我選擇(5)非常滿意;至於餵食嘛,她有時沒有耐心會硬逼小朋友吃,所以第三題我選擇(2)不滿意.)

二. 針對下列幾項音樂課程內容，您對學生的學習成果有多滿意
a.　(　　)有樂理知識
b.有能力來: (　　)寫譜
　(　　)發聲
　(　　)音感
　(　　)節奏
　(　　)指揮
　(　　)視唱
c.　(　　)有唱歌的能力
d.有演奏樂器的能力
　(　　)直笛
　(　　)鍵盤
e.(　　)有創作音樂的能力
f.(　　)有欣賞音樂的能力
g.(　　)音樂興趣的養成
h.(　　)有音樂會、劇場表演的機會
i.(　　)能了解音樂與時代社會的關係
j.(　　)有辯別音樂風格差異的能力
k.(　　)能欣賞和分析自然、人工、和藝術品的美
l.(　　)有運用資訊科技(例如網際網路)的能力,可以蒐集當代藝術生活趨勢的資料
m.(　　)有運用多元媒體來創作音樂的能力
n.(　　)能了解社會關懷和環境保護的議題

1-絕對做不到
2-可能做不到
3-中立
4-可能作得到
5-一定作得到
0-不知道

範例 針對下列的育嬰技巧，你的新裸母未來的達成情況可以預估是.....
1. (1)洗澡　　2. (5)換尿布　　3. (4)餵食
(思考：我沒要求她要替孩子洗澡，所以第一題我選擇(1)她絕對做不到，至於換尿布嘛，我都教那麼多次了，所以第二題我選擇(5)她一定做得到！至於餵食方面，她自己也有餵過自己的孩子，所以第三題我選擇(4)她可能做得到。)

三.針對下列音樂課程內容，您認爲適合今日的學校嗎?
a. (　　)音樂興趣的養成
b. (　　)有音樂會、劇場表演的機會
c. (　　)能了解音樂與時代社會的關係
d. (　　)有辯別音樂風格差異的能力
e. (　　)能欣賞和分析自然、人工、和藝術品的美
f. (　　)有運用資訊科技(例如網際 網路)的能力,可以蒐集當代藝術生活趨勢的資料
g. (　　)有運用多元媒體來創作音樂的能力
h. (　　)能了解社會關懷和環境保護的議題

四. 你認爲自己有能力去設計課程來實現下列音樂課程內容嗎?
a.　(　　)有樂理知識
b.有能力來:
　　(　　)寫譜
　　(　　)發聲
　　(　　)音感
　　(　　)節奏
　　(　　)指揮
　　(　　)視唱
c.　(　　)有唱歌的能力
d.有演奏樂器的能力
　　(　　)直笛
　　(　　)鍵盤
e.(　　)有創作音樂的能力
f.(　　)有欣賞音樂的能力
g.(　　)音樂興趣的養成
h.(　　)有音樂會、劇場表演的機會
i.(　　)能了解音樂與時代社會的關係
j.(　　)有辯別音樂風格差異的能力
k.(　　)能欣賞和分析自然、人工、和藝術品的美
l.(　　)有運用資訊科技(例如網際網路)的能力,可以蒐集當代藝術生活趨勢的資料
m.(　　)有運用多元媒體來創作音樂的能力
n.(　　)能了解社會關懷和環境保護的議題

範例

下列那三個地方在錢不夠時我會選擇不去吃？

麥當勞 (2) 肯塔基 ( ) 百勝客 (3)

美以美早餐店 ( ) 凱悅飯店的餐廳 (1) 路邊攤 ( )

(思考：我第一個先不考慮凱悅飯店,因爲那裡很貴; 第二個不會去的是麥當勞, 因爲若在速食店要吃飽也是蠻貴的,而且熱量太高了; 我第三個選擇是百勝客,因爲我對起司過敏.)

五. 下列那三項音樂課程內容在教學時間不夠時你會選<u>不教</u> (用 1 2 3 順序表示項)

a. ( )有樂理知識

b.有能力來:

( )寫譜

( )發聲

( )音感

( )節奏

( )指揮

( )視唱

c. ( )有唱歌的能力

d.有演奏樂器能力

( )直笛

( )鍵盤

e.( )音樂興趣的養成

f.( )有音樂會、劇場表演的機會

g.( )能了解音樂與時代社會的關係

h.( )有辯別音樂風格差異的能力

i.( )能欣賞和分析自然、人工、和藝術品的美

j.( )有運用資訊科技(例如網際網路)的能力,可以蒐集當代藝術生活趨勢的資料

k.( )有運用多元媒體來創作音樂的能力

l.( )能了解社會關懷和環境保護的議題

六. 下列那三項音樂課程內容在教學時間不夠時你會選擇<u>先教</u> (用 1 2 3 順序表示項)

a. ( )有樂理知識

b.有能力來:

( )寫譜

( )發聲

( )音感

( )節奏

( )指揮

( )視唱

c. ( )有唱歌的能力

d.有演奏樂器能力

( )直笛

( )鍵盤

e.( )音樂興趣的養成

f.( )有音樂會、劇場表演的機會

g.( )能了解音樂與時代社會的關係

h.( )有辯別音樂風格差異的能力

i.( )能欣賞和分析自然、人工、和藝術品的美

j.( )有運用資訊科技(例如網際網路)的能力,可以蒐集當代藝術生活趨勢的資料

k.( )有運用多元媒體來創作音樂的能力

l.( )能了解社會關懷和環境保護的議題

1 非常不同意　　2 不同意　　3 中立　　4 同意　　5 非常同意　　0 不知道

範例

1. (5)我喜歡吃麥當勞　　2. (1)我會介紹別人去吃麥當勞　　3. (3)就算要排隊去吃麥當勞也值得

(思考：我真的很喜歡吃麥當勞的薯條,所以第一題我選擇(5)非常同意;但是我認爲麥當勞的很多東西都太油了，吃多會有礙健康，所以第二題我選擇(1)非常不同意;若是趕時間我是不會花時間排隊的，但是若是附贈 Hello Kitty 又另當別論了，所以第三題我選擇(3)中立。)

七、針對下列情境，您同意嗎?

a.(　　) 如果在我的同事中有人很積極地在作課程統整,而且至少帶領另一位老師成爲發展課程統整的夥伴,我**也會**跟隨他作課程統整

b.(　　) 行政單位**沒有**提供我作課程統整所須要的支持

c.(　　) 我和同教學團隊的老師**沒有**共同的課程計劃時間

d.(　　) 我認爲因爲課程統整學生**會失去**學習重要的音樂知識和技巧的機會

e.(　　) 我有壓力要教必須教授的教材

f.(　　) 我的學生因爲實行課程統整而**有**課堂秩序的問題

g.(　　) 我對課程統整的方法和概念**不了解**

h.(　　) 我對別科老師在他的課堂中教有關音樂的部份**不放心**

i.(　　) 我認爲課程統整的觀念和價值**沒有**讓家長和社會大眾了解

j.(　　) 我**沒有**被裝備好去教統整課程

k.(　　) 我缺乏團隊教學的經驗

l.(　　) 在統整學習下,我很困難作學生評量

請回到第一頁記下您的結束做答時間！

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1. 請問您這份問卷調查和前次的問卷調查(四月)比較起來，有沒有讓您比較清楚知道題意？
   (　　)是　　(　　)否
2. 請問您這份問卷調查的題目會不會太多而讓您不耐？
   (　　)是　　(　　)否
3. 您有甚麼建議可以讓這份問卷調查更完善
   (　　)沒有
   (　　)有，_____

APPENDIX G

JUDGE FORMS

Part A: Judge form used for first questionnaire

Direction

I. Essentiality: rate each selected content area on a 4-point scale for the extent to which it relates to the curriculum requirement. The researcher will revise the content areas until you agree that the selected content areas are relevant and no need to revise.

1- not essential, should eliminate

2- not essential, but could keep if revise

3- essential, but need revise

4- essential, no need to revise

II. Representatives: matching each selected content area to the curriculum requirement you think the selected content area best represents, and highlight these content areas on the curriculum. The researcher will revise the content areas until you agree that all the learning objectives of the curriculum are covered.

Part B: Judge form used for second questionnaire

Direction (說明)

Essentiality (重要性)

You will rate each content area and each question on a 4-point scale(請你做選擇)

1. not essential, should eliminate(不重要，應該去掉)
2. not essential, but could keep if revise(不重要，但修改後可以留著)
3. essential, but need revise(重要，但須要修改)
4. essential, no need to revise(重要，不須要修改)

Representative (代表性)

You will match each selected content areas to the curriculum content areas that the question best represents, and highlight those sentences. Write down the percentage of curricular content area covered. Afterwards, you may write down which content area is missing.

請你將每一選項跟課程標準的內容對照後，先在課程標準的內容上做記號，再決定所有的選項佔課程標準內容有多少百分比，之後，你再將你認爲遺漏的部份寫下。

Part C: Chart for Content Validity Check

Item			Essentiality of this question to the topic of "teachers' attitude toward the Arts and Humanities Curriculum" 左項問題對"音樂老師對藝術與人文課程的態度"這個研究主題重要嗎?(1-4)	
1	Question	下列的音樂內容，在"藝術與人文"課程實施後，您在音樂課中涵蓋多少 How thoroughly do you teach the following musical content areas within the Arts and Humanities Curriculum?		
			Essential to curricular contents 左邊選項是否是舊音樂課程的主要內容? (1-4)	Representative to old music curriculum 左邊選項是否能代表舊的音樂課程標準?
	Answer	樂理(Music Theory)		共(total) _____%
		寫譜(Notation)		
		發聲 (Vocal Warm-up)		
		音感 (Ear Training)		
		節奏(Rhythmic Practice)		可以再加上 (You may add additional content areas here)
		指揮 (Conducting)		
		視唱 (Sight-singing)		
		唱歌(Group Singing)		
		直笛 演奏(Recorder)		
		鍵盤 演奏(Keyboard)		
		音樂創作(Composing)		
		音樂欣賞(Music Appreciation)		

			Essentiality of this question to the topic of "teachers' attitude toward the Arts and Humanities Curriculum" 左項問題對"音樂老師對藝術與人文課程的態度"這個研究主題重要嗎?(1-4)	
2	Question	針對下列幾項教學目標，您對學生的學習成果有多滿意 To what extent are you satisfied with the students' performance in the following content areas?		
			Essential to curricular contents 左邊選項是否是舊音樂課程的主要內容? (1-4)	Representative to old music curriculum 左邊選項是否能代表舊的音樂課程標準?
	Answer	樂理(Music Theory)		共(total) _____% 可以再加上 (You may add additional content areas here) _____
		寫譜(Notation)		
		發聲 (Vocal Warm-up)		
		音感 (Ear Training)		
		節奏(Rhythmic Practice)		
		指揮 (Conducting)		
		視唱 (Sight-singing)		
		唱歌(Group Singing)		
		直笛 演奏(Recorder)		
		鍵盤 演奏(Keyboard)		
		音樂創作(Composing)		
		音樂欣賞(Music Appreciation)		

			Essential to curricular contents 左邊選項是否是藝術與人文課程的主要內容? (1-4)	Representative to the Arts and Humanities Curriculum 左邊選項是否能代表藝術與人文課程標準?
2		音樂興趣的養成(Cultivating music interests)		共(total) _____%
		有音樂會、劇場表演的機會(Able to participate in concerts and drama)		
		能了解音樂與時代社會的關係(Able to relate music with the society)		可以再加上 (May add the following) _____
		有辯別音樂風格差異的能力(Able to differentiate various music styles)		
		能欣賞和分析自然、人工、和藝術品的美(Able to appreciate and analyze the beauty of nature, man-made surroundings, and works of art.)		
		有運用資訊科技(例如網際網路)的能力,可以蒐集當代藝術生活趨勢的資料 (Able to use technology (such as internet) to collect information on trends in modern art.)		
		有運用多元媒體來創作音樂的能力(Able to use multi-media to compose music)		
		能了解社會關懷和環境保護的議題(Able to reflect on social and environmental issues)		

			Essentiality of this question to the topic of “teachers’ attitude toward the Arts and Humanities Curriculum” 左項問題對”音樂老師對藝術與人文課程的態度”這個研究主題重要嗎?(1-4)	
3	Question	針對下列教學目標，您認爲在教學上實際的可行性如何 Are the following content areas appropriate for today’s classroom?		
	Answers	Omitted here, since repeated in #2.		
			Essentiality of this question to the topic of “teachers’ attitude toward the Arts and Humanities Curriculum” 左項問題對”音樂老師對藝術與人文課程的態度”這個研究主題重要嗎?(1-4)	
4	Question	你認爲自己有能力去設計課程來實現下列教學目標的程度有多少 How well do you perceive yourself as being capable of developing curriculum to accomplish the following learning objectives?		
	Answers	Omitted here, since repeated in #2.		

			Essentiality of this question to the topic of "teachers' attitude toward the Arts and Humanities Curriculum" 左項問題對"音樂老師對藝術與人文課程的態度"這個研究主題重要嗎?(1-4)
5	Question	下列那三項教學目標在教學時間不夠時你會選擇不達成 (您只需要用 1 2 3 順序選出三項) If class time is limited, which three learning objectives will you choose WILL NOT to accomplish? (Please choose only three and prioritize your choices by using 1, 2, 3)	
	Answers	Omitted here, since repeated in #2.	
			Essentiality of this question to the topic of "teachers' attitude toward the Arts and Humanities Curriculum" 左項問題對"音樂老師對藝術與人文課程的態度"這個研究主題重要嗎?(1-4)
6	Question	下列那三項教學目標在教學時間不夠時你會選擇先達成 (您只需要用 1 2 3 順序選出三項) If class time is limited, which three learning objectives will you choose to accomplish? (Please choose only three and prioritize your choices by using 1, 2, 3)	
	Answers	Omitted here, since repeated in #2.	

			Essential to curriculum integration 是否對課程統整重要 (1-4)
7	如果在我的同事中有人很積極地在作課程統整,而且至少帶領另一位老師成爲發展課程統整的夥伴,我**也會**跟隨他作課程統整(If a fellow teacher has enthusiastically implemented the integrated curriculum, and has brought at least one other teacher on board to further develop the integrated curriculum, then I am willing to implement it.)		
	行政單位**沒有**提供我作課程統整所須要的支持(The administration has not provided support for me to implement the integrated curriculum.)		
	我和同教學團隊的老師**沒有**共同的課程計劃時間(I do not share a common planning time with other teachers.)		
	我認爲因爲課程統整學生**會失去**學習重要的音樂知識和技巧的機會(I think students will lose the opportunity to learn important musical knowledge and skills in an integrated curriculum.)		
	我有壓力要教必須教授的教材(I feel pressured to cover the required materials.)		
	我的學生因爲實行課程統整而**有**課堂秩序的問題(My students have discipline problems since implementing the integrated curriculum.)		
	我對課程統整的方法和概念**不了解**(I do not have a solid understanding of the integrated curriculum.)		
	我對別科老師在他的課堂中教有關音樂的部份**不放心**(I am uncomfortable with non-music teachers teaching music in their classrooms.)		
	我認爲課程統整的觀念和價值**沒有**讓家長和社會大眾了解(I think the concept and value of the integrated curriculum were not well communicated to the parents and general public.)		
	我**沒有**被裝備好去教統整課程(I have not been properly prepared to implement the integrated curriculum.)		
	我缺乏團隊教學的經驗(I lack the team teaching experience required for the integrated curriculum.)		
	在統整學習下,我很困難作學生評量(It is difficult for me personally to assess and evaluate the student's learning in an integrated curriculum setting.)		

Part D: Suggestions Made by Judges for Second Questionnaire

I. The following list should be added to the selection of the music basics skills

1. Comparison of musical works
2. Knowledge about attending a concert.
3. Chinese scale and instruments
4. Modern Chinese musical plays
5. Making musical instruments
6. Able to distinguish various sound and shapes of instruments
7. Able to distinguish various choral and instrumental performances.
8. The sight-singing should be described more specifically.
9. Two kinds of ear training needs to add: (1) sing at exact pitches after listen to piano playing, and (2) sing at exact pitches after listen to teacher's singing.

II. The following list should be added to the section of the Arts and Humanities Curriculum

1. Public arts and web design for the music
2. Using organized performances to help students cultivate initiative, cooperation, mutual respect, self-discipline, communication, and leadership
3. Apply music with everyday activities
4. Able to reflect on "pro-life" issue

APPENDIX H

FREQUENCY RESULTS FOR MAIN STUDY

Table 1

Teachers' Satisfaction of Students' Music Achievement

Category	Frequency
Music theory	
Very terrible	5
Unacceptable	18
Somewhat unacceptable	18
Somewhat acceptable	35
Good	9
Excellent	1
I can't decide	6
Conducting	
Very terrible	4
Unacceptable	20
Somewhat unacceptable	12
Somewhat acceptable	40
Good	12
I can't decide	4
Music interests	
Unacceptable	5
Somewhat unacceptable	10
Somewhat acceptable	39
Good	31
Excellent	5
I can't decide	2

Table 1 (continued)

Teachers' Satisfaction of Students' Music Achievement

Category	Frequency
Stylish difference	
Very terrible	2
Unacceptable	7
Somewhat unacceptable	27
Somewhat acceptable	41
Good	12
I can't decide	3
Organize concert	
Very terrible	6
Unacceptable	19
Somewhat unacceptable	20
Somewhat acceptable	31
Good	12
Excellent	1
I can't decide	3
Know relation between music and the society	
Very terrible	8
Unacceptable	13
Somewhat unacceptable	24
Somewhat acceptable	30
Good	12
I can't decide	5
Appreciate beauty within nature and arts work	
Very terrible	4
Unacceptable	13
Somewhat unacceptable	23
Somewhat acceptable	33
Good	10
I can't decide	9

Table 1 (continued)

Teachers' Satisfaction of Students' Music Achievement

Category	Frequency
Use internet to learn	
Very terrible	3
Unacceptable	9
Somewhat unacceptable	13
Somewhat acceptable	30
Good	28
Excellent	3
I can't decide	6
Use various medium to compose	
Very terrible	6
Unacceptable	17
Somewhat unacceptable	22
Somewhat acceptable	21
Good	13
I can't decide	13
Environmental and societal awareness	
Very terrible	4
Unacceptable	20
Somewhat unacceptable	27
Somewhat acceptable	25
Good	8
I can't decide	8

Table 2

Teachers Confidence in Lesson Planning with the Arts and Humanities Curriculum

Category	Frequency
Music theory	
Definitely not	2
Very probably not	1
Probably not	1
Probably	32
Very probably	22
Definitely	34
I can't decide	6
Write by ear	
Definitely not	4
Very probably not	6
Probably not	17
Probably	30
Very probably	15
Definitely	14
I can't decide	6
Singing by ear	
Definitely not	1
Very probably not	4
Probably not	12
Probably	29
Very probably	20
Definitely	23
I can't decide	3

Table 2 (continued)

Teachers Confidence in Lesson Planning with the Arts and Humanities Curriculum

Category	Frequency
Play by ear	
Definitely not	3
Very probably not	7
Probably not	20
Probably	25
Very probably	16
Definitely	16
I can't decide	5
Sight-reading	
Definitely not	2
Very probably not	5
Probably not	13
Probably	27
Very probably	21
Definitely	20
I can't decide	4
Sight-singing	
Definitely not	1
Very probably not	5
Probably not	11
Probably	35
Very probably	19
Definitely	18
I can't decide	3

Table 2 (continued)

Teachers Confidence in Lesson Planning with the Arts and Humanities Curriculum

Category	Frequency
Conducting	
Definitely not	1
Very probably not	1
Probably not	5
Probably	28
Very probably	31
Definitely	22
I can’t decide	4
Group Singing	
Definitely not	0
Very probably not	0
Probably not	1
Probably	14
Very probably	20
Definitely	56
I can’t decide	1
Recorder playing	
Definitely not	0
Very probably not	1
Probably not	1
Probably	12
Very probably	21
Definitely	56
I can’t decide	1

Table 2 (continued)

Teachers Confidence in Lesson Planning with the Arts and Humanities Curriculum

Category	Frequency
Keyboard playing	
Definitely not	7
Very probably not	7
Probably not	19
Probably	15
Very probably	13
Definitely	22
I can’t decide	9
Composing	
Definitely not	2
Very probably not	5
Probably not	12
Probably	37
Very probably	16
Definitely	15
I can’t decide	5
Music appreciation	
Definitely not	0
Very probably not	0
Probably not	1
Probably	12
Very probably	20
Definitely	58
I can’t decide	1

Table 2 (continued)

Teachers Confidence in Lesson Planning with the Arts and Humanities Curriculum

Category	Frequency
Music interests	
Definitely not	0
Very probably not	0
Probably not	4
Probably	25
Very probably	30
Definitely	32
I can’t decide	1
Stylish difference	
Definitely not	0
Very probably not	0
Probably not	5
Probably	35
Very probably	26
Definitely	25
I can’t decide	1
Organize concert	
Definitely not	0
Very probably not	3
Probably not	13
Probably	32
Very probably	23
Definitely	20
I can’t decide	1

Table 2 (continued)

Teachers Confidence in Lesson Planning with the Arts and Humanities Curriculum

Category	Frequency
Know relation between music and the society	
Definitely not	0
Very probably not	1
Probably not	8
Probably	39
Very probably	26
Definitely	15
I can't decide	3
Appreciate nature beauty and arts work	
Definitely not	0
Very probably not	1
Probably not	14
Probably	36
Very probably	21
Definitely	14
I can't decide	6
Use internet to learn	
Definitely not	2
Very probably not	1
Probably not	5
Probably	23
Very probably	26
Definitely	32
I can't decide	5

Table 2 (continued)

Teachers Confidence in Lesson Planning with the Arts and Humanities Curriculum

Category	Frequency
Use various medium to compose	
Definitely not	2
Very probably not	2
Probably not	14
Probably	32
Very probably	27
Definitely	11
I can’t decide	4
Environmental and societal awareness	
Definitely not	0
Very probably not	3
Probably not	9
Probably	36
Very probably	24
Definitely	18
I can’t decide	2

Table 3

The Three Most Important Musical Content Areas

Learning	Rank	Count	Weighted score
Music appreciation			150
	1	28	
	2	26	
	3	14	
Music interests			149
	1	35	
	2	19	
	3	6	
Group Singing			65
	1	8	
	2	15	
	3	11	
Recorder playing			56
	1	5	
	2	12	
	3	17	
Music theory			31
	1	4	
	2	4	
	3	11	
Know relation between music and the society			17
	1	3	
	2	2	
	3	4	
Environmental and societal awareness			13
	1	1	
	2	1	
	3	8	

Table 3 (continued)

The Three Most Important Musical Content Areas

Learning	Rank	Count	Weighted score
Appreciate nature beauty and arts work			12
	1	1	
	2	2	
	3	5	
Stylish difference			7
	1	0	
	2	2	
	3	3	
Organize concert			6
	1	0	
	2	2	
	3	2	
Use internet to learn			4
	1	0	
	2	0	
	3	2	
Conducting			4
	1	1	
	2	0	
	3	1	
Sight-singing			3
	1	1	
	2	0	
	3	0	
Sight-reading			1
	1	0	
	2	0	
	3	1	

Table 3 (continued)

The Three Most Important Musical Content Areas

Learning	Rank	Count	Weighted score
Write by ear			0
Singing by ear			0
Play by ear			0
Keyboard playing			0
Composing			0
Use various medium to compose			0

Table 4

The Three Least Important Musical Content Areas

Learning	Rank	Count	Weighted score
Write by ear			125
	1	30	
	2	10	
	3	15	
Play by ear			81
	1	10	
	2	20	
	3	11	
Sight-reading			58
	1	10	
	2	8	
	3	12	
Keyboard playing			51
	1	7	
	2	12	
	3	6	
Sight-singing			29
	1	2	
	2	8	
	3	7	
Conducting			24
	1	5	
	2	7	
	3	5	
Singing by ear			22
	1	2	
	2	6	
	3	4	

Table 4 (continued)

The Three Least Important Musical Content Areas

Learning	Rank	Count	Weighted score
Use various medium to compose			22
	1	3	
	2	4	
	3	5	
Composing			18
	1	4	
	2	1	
	3	4	
Music theory			12
	1	3	
	2	0	
	3	3	
Stylish difference			9
	1	1	
	2	2	
	3	2	
Environmental and societal awareness			9
	1	0	
	2	2	
	3	5	
Appreciate nature beauty and arts work			7
	1	1	
	2	1	
	3	2	
Know relation between music and the society			5
	1	1	
	2	1	
	3	0	

Table 4 (continued)

The Three Least Important Musical Content Areas

Learning	Rank	Count	Weighted score
Organize concert			4
	1	1	
	2	0	
	3	1	
Recorder playing			3
	1	1	
	2	0	
	3	0	
Music appreciation			0
Music interests			0
Group Singing			0
Use internet to learn			0

APPENDIX I

RESEARCH CONSENT FORM

(Approval Letter from the University of North Texas, Office of Research Services)

UNIVERSITY of NORTH TEXAS

Office of Research Services

January 31, 2005

Lingchun Lai
Department of Music Education
University of North Texas

Re: Human Subjects Application No. 04-361

Dear Ms. Lai,

As permitted by federal law and regulations governing the use of human subjects in research projects (45 CFR 46), the UNT Institutional Review Board has reviewed your proposed project titled "Investigation of the Music Teachers' Attitudinal Changes on Teaching Music in the Junior High School That Occurred as the Taiwanese Nation Grad 1 – 9 Curriculum Transitioned from a Traditional Music Focus to a Related Arts Focus." The risks inherent in this research are minimal, and the potential benefits to the subject outweigh those risks. The submitted protocol and informed consent form are hereby approved for the use of human subjects in this study. **Federal policy 45 CFR 46.109(e) stipulates that IRB approval is for one year only**.

Enclosed is the consent document with stamped IRB approval. Please copy and **use this form only** for your study subjects.

It is your responsibility according to U.S. Department of Health and Human Services regulations to submit annual and terminal progress reports to the IRB for this project. Please mark your calendar accordingly. **The IRB must also review this project prior to any modifications.**

Please contact Shelia Bourns, Research Compliance Administrator, at ext. 3940 or Boyd Herndon, Director of Research Compliance, if you wish to make changes or need additional information.

Sincerely,

Scott Simpkins, Ph.D.
Chair
Institutional Review Board

P.O. Box 305250 • Denton, Texas 76203-5250 • (940) 565-3940
Fax (940) 565-4277 • TTY (800) RELAY TX • www.unt.edu

University of North Texas

Institutional Review Board

Research Consent Form

Title of Study: Investigation of music teachers' attitudes toward teaching junior high school music in a newly adapted the Arts and Humanities Curriculum from the National Nine-Year Integrated Curriculum of Taiwan

Investigator: Lingchun Lai

Start Date of Study: 01/31/2005 **End Date of Study**: 01/30/2006

Dear teachers,

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose and benefits of the study and how it will be conducted.

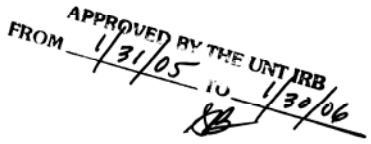
The purpose of the study is to investigate Taiwan junior high school music teachers' attitudes towards the National Nine-Year Integrated Curriculum. One questionnaire is designed for this researcher. Questions in this questionnaire include teachers' opinions regarding (1) the music basics covered, (2) the feasibility of new curriculum, (3) students' music achievement, (4) the confidence in developing curriculum, and (5) implementation obstacles. There is no foreseeable risk. It will take proximately 20 minutes to complete this questionnaire. The information you provide will be beneficial to successful implementation of the new curriculum. All respondents will be kept anonymous and no attempts will be made to connect your answers with your school.

This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 or sbourns@unt.edu with any questions regarding the rights of research subjects.

Research Subject's Rights

I understand that I do not have to answer this survey, and my refusal to participate will involve no penalty, loss of rights, or benefits. In case I have any questions about the study, I have been informed I can contact Lingchun Lai, UNT doctoral student, at telephone number 002-1-972-618-7949 or email: grace1996@hotmail.com; or Dr. Darhyl Ramsey, professor of music education department, at 002-1-940-565-3749 or email: ramsey@music.unt.edu.

I understand my rights as research subject and I voluntarily consent to participate in this study. I understand what the study is about, how the study is conducted, and why it is being performed. I understand that I can keep this letter for my records and mail the survey back to the Principal Investigator.



University of North Texas

協助審核委員會

研究同意書

研究題目

國中音樂老師對九年一貫藝術與人文課程態度的調查

研究者:賴玲君

研究期間: 1/31/2005 到 01/30/2006

在同意參與這項研究之前,重要的是,您要讀過並且瞭解研究目的、研究貢獻、和程序。

這項研究的目的是想調查在國中音樂老師對九年一貫課程的態度。此份問卷正是爲了這項研究而設計。問卷的問題包括音樂老師對以下五項的意見(1) 音樂部份有教多少，(2) 新課程的可行性，(3)學生音樂成就，(4) 教師對設計課程的自信心, 以及(5) 實施障礙。問卷調查對您沒有可預見的風險。回答此份問卷大約要花二十分鐘。您所提供的資訊將有益於新課程實施。您所提供的資訊將不計名,您的回答不會被聯想到您任職的學校。

這項研究已經由UNT的協助審核委員會審核通過,如果您有任何疑問您可以用電話(002-1-940-565-3940) 或 email 至sbourns@unt.edu和UNT的協助審核委員會連絡。

受試者的權力

我瞭解,我不需要強迫自己參與這項研究,我的拒絕參與不會導致被罰,或喪失我的權利。如有任何疑問，我被告知可以用電話 (002-1-972-941-8988) 或email 至grace1996@hotmail.com 和北德州大學的博士班學生賴玲君連絡；或是用電話 (002-1-940-565-3749) 或email至ramsey@music.unt.edu 和音樂教育系教授 Dr. Darhyl Ramsey 連絡。

我瞭解我受試者的權力，我自願同意參與研究，我瞭解在研究甚麼，怎麼做，爲什麼做這個研究。我瞭解我可以留下這封信作我個人的記錄，並將完成回答的問卷寄回主試者.

References

Aaronsohn, E., Carter, C. J., & Howell, M. (1995). Preparing monocultural teachers for a multicultural world: Attitudes toward inner-city schools. *Equity and Excellence in Education*, *28*(1), 5-9.

Alreck, P. L, & Settle, R. (2003). *Survey research handbook*. New York: McGraw-Hill

Barrett, J. R., McCoy, C. W., & Veblen, K. K. (1997). *Sound ways of knowing: Music in the interdisciplinary curriculum*. New York: Schirmer Books.

Barry, N.H. & Lechner, J.V. (1995). Preservice teachers' attitudes about and awareness of multicultural teaching and learning. *Teaching and Teacher Education, 11*(2), 149-161.

Beane, J. (1990). *A middle school curriculum: From rhetoric to reality*. Columbus, OH: National Middle School Association.

Boyd, A. (1994). *The relationship of selected strategies associated with thematic approach to student achievement in New Jersey middle schools.* (Doctoral dissertation, Seton Hall University, 1994). *Dissertation Abstracts International*, *56*(05), 1639.

Boyle-Baise, L. & Sleeter, C.E. (2000). Community-based service learning for multicultural teacher education. *Educational Foundations, 14*(2), 33-50.

Brazee, E. N., & Capelluti, J. (1995). *Dissolving boundaries: Toward an integrative curriculum*. (Report No. ISBN-1-56090-090-3). Columbus, OH: National Middle School Association. (ERIC Document Reproduction Service No. ED397982)

Bresler, L. (1995). The subservient, co-equal, affective, and social integration styles and their implications for the arts. *Arts Education Policy Review, 96*(5), 31-37.

Brewer, T. M. (2002). Integrated curriculum: What benefits? *Arts Education Policy Review, 103(*4), 31-36.

Brookfield, S. (1995). *Becoming a Critically Reflective Teacher.* San Francisco: Jossey Bass.

Bullough, R. (1992). Becoming a teacher: Self and the social location of teacher education. In T. Good, B. Biddle, & I. Goodson (Eds.), *The International Handbook of Teachers and Teaching,* new York: Macmillan.

Calderhead, J. (1991). Images of teaching: Student teachers' early conceptions of classroom practice. *Teaching and Teacher Education, 7*(1), 1-8.

Carmines, E. G. & Zeller, R. A. (1979). Reliability and validity assessment. Beverly Hills, CA: Sage.

Corn, A. E. (1993). Arts integration and curricular change: A case study of five first and second grades. (Doctoral dissertation, University of Missouri, 1993). *Dissertation Abstracts International, 54*(11), 3967.

Cronbach, L. S. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*, 297-334.

Cutietta, R. A. (1992). The measurement of attitudes and preferences in music education. In R. Colwell (Ed.), *Handbook of research on music teaching and learning* (pp. 295-309). New York: Schiemer Books.

Dawes, R. M. & Smith, T. L. (1985). Attitude and opinion measurement. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (3rd ed., Vol. 1, pp.509-566). New York: Newbery Award Records.

De Vaus, D. A. (Vol. Ed.) (1990). *Surveys in social research.* In M. Bulmer (Series Ed.), *Contemporary social research: Vol. 11* (2nd ed.). London: Unwin Hyman.

Dougherty, M. B. (1999). Integrating curriculum at the secondary school level. *Dissertation Abstracts International, 60*(06), 1886. (UMI No. 9934601)

Drake, S. (1998). *Creating integrated curriculum: Proven ways to increase student learning*. Thousand Oaks, CA: Corwin Press.

Eagly, A. H. & Chaiken, S. (1993). *The psychology of attitudes*. Orland, FL: Harcourt Brace Jovanovich.

Emmanuel, D. T. (2002). A music education immersion internship: Pre-service teachers' beliefs concerning teaching music in a culturally diverse setting. *Dissertation Abstracts International*, *63*(09), 3141, (UMI No. 3064224)

Ernest, K. F. (1991). Effectiveness of an interdisciplinary team teaching organization on student achievement and student attitudes toward school in selected middle schools. *Dissertation Abstracts International, 52*(07), 2492. (UMI No. AAT9135950)

Fishbein, M., & Middlestadt, S. E. (1995). Noncognitive effects on attitude formation and change: Fact or artifact? *Journal of Consumer Psychology*, *4*(2), 181-202.

Fishbein, M., & Middlestadt, S. E. (1997). A striking lack of evidence for nonbelief-based attitude formation and change: A response to five commentaries. *Journal of Consumer Psychology*, *6*(1), 107-115.

Floyd-Levin, R. (1995). Perspectives from England on using integrated curriculum: A thematic approach to social studies. *Dissertation Abstracts International, 59*(08), 2843. (UMI No. AAT9726575)

Fogarty, R. (1991). *The mindful school*: *How to integrate the curricula.* Palatine, IL: IRI/Skylight.

Fogarty, R. (1993). Ten ways to integrate curriculum. In R. Fogarty (Ed.), *Integrating the curricula*: *A collection* (pp. 101-110). Arlington Heights, IL: IRI/SkyLight.

Fry, P.G. & McKinney, L.J. (1997). A qualitative study of preservice teachers' early field experiences in an urban, culturally different school. *Urban Education, 32*(2), 184-201.

Gagne, R. M. (1985). *The conditions of learning and theory of instruction* (4th ed.). New York: Holt, Rinehart, and Winston.

Gale, R. M. (1990). Teaching music across the curriculum: A case study. *Masters Abstracts International, 30*(03), 448. (UMI No. AAT MM61560)

Gaskins, A. G. (1994). Influences of interdisciplinary teaming on teachers in an urban high school. *Dissertation Abstracts International, 56*(03), 881. (UMI No. AAT9523485)

Goode, A. L. (1998). An analysis of secondary teachers' use of integrated curriculum in English and social studies classroom. *Dissertation Abstracts International, 60*(03), 696. (UMI No. AAT9920849)

Gore, P. B. (Ed.) (1986). *Webster's third new international dictionary of the English language unabridged*. Springfield, MA: Merriam-Webster.

Grant, C.A. & Koskela, R.A. (1986). Education that is multicultural and the relationship between preservice campus learning and field experiences. *Journal of Educational Research, 79*(4), 197-204.

Greenberg, J. L. (1995). The impact of interdisciplinary teaming on the job satisfaction of middle school teachers. *Dissertation Abstracts International*, 57(01), 48. (UMI No. AAT9612932)

Grenoble, A. B. (1975). Attitude, affectivity and prediction. *The Journal of Value Inquiry*, *9*, pp. 312-314.

Hart-Davis, C. (1994). *Improving first grade academic skills through the integration of music into the first grade curriculum.* (Action Research Final Report). Chicago, IL: Saint Xavier University. (ERIC Document Reproduction Service No. ED378098)

Hartzler, D. S. (2000). A meta-analysis of studies conducted on integrated curriculum programs and their effects on student achievement. *Dissertation Abstracts International, 61*(03), 865. (UMI No. AAT9967119)

Haugtvedt, C. P., Petty, R. E., & Cacioppo, J. T. (1992). Need for cognition and advertising: Understanding the role of personality variables in consumer behavior. *Journal of Consumer Psychology*, *1*(3), 239-260.

Holt-Reynolds, D. (1992). Personal history-based beliefs as relevant prior knowledge in course work. *American Educational Research Journal*, *29*(2), 325-349.

Hope, S. (1997). Drumbeats and cadences, creativity ad education. In T. Brewer and D. Morris (Eds.) Proceedings and Recommendations for the Drumbeat96 Conference. University of Southern Mississippi: College of the Arts, 7-11.

Hove-Pabst, S. C. (1994). Creating original opera in a rural school: Integration and relevance in discovery learning music education. *Dissertation Abstracts International, 55*(09), 2758. (UMI No. AAT9502323)

Hsieh, K. [謝金青] (2001). 九年一貫課程九年一貫課程第一年試辦成效之評估-以桃竹苗地區試辦國民小學爲例 [The evaluation of the nine-year curriculum system in elementary schools during 1999 to 2000]. *暨大學報* [*The National Chi Nan University Journal*], *5*(2), 65-107.

Huang, Y. [黃義良] (2000). 國民中學教師對於九年一貫課程實施的認知與態度的研究 [A study of the junior high teachers' attitudes toward implementing the Grade Nine-Year Curriculum]. *中等教育學報* [*Journal of Secondary Education*] , *7*, 43-66.

Jablon, P. C. (1989). A documentation and impact analysis of a project-oriented, interdisciplinary, team-taught, peer-influence program for secondary schools and its effects upon science learning. *Dissertation Abstracts International, 51*(02), 397. (UMI No. AAT9016410)

Jacobs, H. H. (1989). Design options for an integrated curriculum. In H. H. Jacobs (Ed.), *Interdisciplinary curriculum: Design and implementation* (pp. 14-21). Alexandria, VA: Association for Supervision and Curriculum Development.

Joram, E. & Gavriele, A.J. (1998). Preservice teachers' prior beliefs: Transforming obstacles into opportunities. *Teaching and Teacher Education, 14*(2), 175-191.

Kelley, L. L. (1981). A combined experimental and descriptive study of the effect of music on reading and language. *Dissertation Abstracts International, 42*(03), 1076. (UMI No. AAT8117801)

Kenny, C. B. (1994). The microenvironment of attitude change. *The Journal of Politics*, *56*(3), 715-728.

Kyriakides, L. (1997). Influences on primary teachers' practice: some problems for curriculum change theory. *British Educational Research Journal*, *23*(1), 39-46.

Lacroix, S. E. (2002). The effect of an integrated curriculum on fourth graders' achievement in and attitude toward music instruction. *Dissertation Abstract International*, *64*(01), 91. (UMI No. 3077998)

Mashack-MaCant, B. J. (1988). An integrated curriculum for the arts and the language arts in grade K-3. *Dissertation Abstracts International, 49*(05), 1038. (UMI No. AAT 8814259)

McAllister, G., & Irvine, J. J. (2000). Cross cultural competency and multicultural teacher education. *Review of Educational Research*, *70*(1), 3-24.

McDiarmind, G.W. (1992). What to do about differences? A study of multicultural education for teacher trainees in the Los Angeles Unified School District. *Journal of Teacher Education, 43*(2), 83-93.

Miller, B. A. (1995). Integrating elementary music instruction with a whole language first grade classroom. *Dissertation Abstracts International, 57*(04), 1535. (UMI No. AAT9624439)

Mueller, D. J. (1986). Measuring social attitudes: A handbook for researchers and practitioners. New York: Teachers College Press.

Murphy, E. L. (1993). Interdisciplinary curriculum influences on student achievement, teacher and administrator attitudes, and teacher efficacy. *Dissertation Abstracts International, 54*(11), 3979. (UMI No. AAT9410993)

Nesin, G. (2000). Young adolescent achievement and attitudes in various curriculum designs. (Doctoral dissertation, University of Georgia, 2000). *Dissertation Abstracts International, 61*(08), 3042.

Newman, J. E. (1996). What happens when art isn't absent: The influence of an arts-integrated curriculum on second and fourth grade students enrolled in a K-8 visual and performing arts magnet school (Doctoral dissertation, University of Denver, 1996). *Dissertation Abstracts International*, *57*(7), 2812.

Norusis, M. J. (2003a). *SPSS 12.0 Statistical Procedures Companion*. Upper Saddle River: Prentice Hall.

Norusis, M. J. (2003b). *SPSS 12.0 Guide to Data Analysis.* Upper Saddle River: Prentice Hall.

Padilla, G. (1997). Interdisciplinary team organization in middle schools: team effectiveness and team outcomes. *Dissertation Abstracts International, 59*(02), 389. (UMI No. AAT9825044)

Pickett, J. P. et al. (2006). *The American heritage dictionary of the English language* (4th ed.). Boston: Houghton Mifflin.

Pohan, C. A., & Aguilar, T. E. (2001). Measuring educators' beliefs about diversity in personal and professional contexts. *American Educational Research Journal*, *38*(1), 159-182.

Quinn, G. W. (1995). A description and analysis of teachers' perceptions about interdisciplinary teaming during the transition from a departmentalized program. (Doctoral dissertation, Oklahoma State University, 1995). *Dissertation Abstracts International, 56*(09), 3402.

Random House (Ed.) (1997). *Random house webster's unabridged dictionary*. New York: Random House.

Relan, A. & Kimpston, R. (1991). Curriculum integration: A critical Analysis of practical and conceptual issues. In R. Fogarty (Ed.), *Integrating the curricula*: *A collection* (pp. 31-47). Arlington Heights, IL: IRI/SkyLight.

Rosenberg, M. J. & Hovland, C. I. (1960). Cognitive, affective, and behavioral components of attitudes. In C. I. Hovland, & M. J. Rosenberg (Eds.), *Attitude organization and change* (pp. 1-14). New Haven, CT: Yale University Press.

Schumacher, D. H. (1992). A multiple case study of curriculum integration by middle school interdisciplinary teams of teachers. *Dissertation Abstracts International, 53*(07), 2230. (UMI No. AAT9234247)

Seger, F. D. (1998). Music and the general classroom: Literacy in a new key. *Dissertation Abstracts International, 59*(04), 1060. (UMI No. AAT9831968)

Smith, R. A. (1995). The limits and costs of integration in arts education. *Arts Education Policy Review, 96*(5), 21-25.

Smith, W. F. (1984). Utilizing the arts in general education process to integrate the performing arts into the junior high school (7-9) humanities curriculum plan at the East Harlem Performing Arts School. *Dissertation Abstracts International*, *45*(8), 2435. (UMI No. 8424268)

Stake, R., Bresler, L., & Mabry, L. (1991). *Custom and cherishing*: *The arts in elementary schools.* Urbana, IL: Council for Research in Music Education.

Steinmetz, S. et al. (Ed.) (1997). *Random House Webster's New Universal Unabridged Dictionary* (2nd ed.). New York: Random House.

Stewart, P. J. (1997). A case study of the role of a middle school art teacher in interdisciplinary teaming. *Dissertation Abstracts International, 58*(08), 2966. (UMI No. AAT9805871)

Stokes, D. K. (1997). Called to teach: Exploring the worldview of called prospective teachers during their preservice teacher education experience. (Doctoral Dissertation, The University of Utah, 1997). Digital Dissertations.

Su, B. (1986). *Taiwan's 400 year history: The origins and continuing development of the Taiwanese society and people*. Washington, D.C.: Taiwanese Cultural Grassroots Association.

Teicher, J. M. (1997). Effect of multicultural music experience on preservice elementary teachers' attitudes. *Journal of Research in Music Education*, *45*(3), 415-427.

The Taiwan Ministry of Education (1994). *國民中學課程標準修正版:音樂科課程標準* [*Music Curriculum*, a portion of the *National Junior High School Curriculum* (5th ed.)]. 台北,臺灣:聯教圖書出版有限公司 [Taipei, Taiwan: United Education Publishing].

The Taiwan Ministry of Education (2004). *General Guidelines of the National Nine-Year Integrated Curriculum*. [*九年一貫綱要總綱英文版*] Retrieved on September, 7, 2006, from http://teach.eje.edu.tw/9CC/declare/content.php?ID=341.

The Taiwan Ministry of Education, Department of Statistics (2005). *九十四學年度附設國中部名錄* [*Junior high school demographics, 2005*]. Retrieved on September, 11, 2006, from http://www.edu.tw/EDU_WEB/EDU_MGT/STATISTICS/EDU7220001/data/school/aj.xls

The Taiwan Ministry of Education, Department of Statistics (2005). *國民中學名錄* [*Junior high school address*, *2005*]. Retrieved September 11, 2006 from http://www.edu.tw/EDU_WEB/EDU_MGT/STATISTICS/EDU7220001/data/school/j1.xls

The Taiwan Ministry of Education (2006). Educational Administration System. Retrieved on December, 19, 2006, from http://english.moe.gov.tw/public/attachment/692014291171.pdf

The Taiwan Ministry of Education, Taiwan Elementary and Secondary Educators Community (2003). *九年一貫課程:藝術與人文課程* [*National Nine-Year Integrated Curriculum: Arts and Humanities Curriculum*]. Retrieved September 11, 2006 from http://teach.eje.edu.tw/9CC/fields/2003/artHuman-source.php

The Taiwan Ministry of Education, Taiwan Elementary and Secondary Educators Community (2004). *九年一貫課程試辦學校* [*A list of schools which pilot implemented the National Nine-Year Integrated Curriculum*]. Retrieved September 11, 2006 from http://teach.eje.edu.tw/9CC/course/course2.php

The Taiwan Ministry of Education, Taiwan Elementary and Secondary Educators Community (2004). *學習領域能力指標變異之彙整表* [Revised *Competency Indicators*]. Retrieved September 11, 2006 from http://teach.eje.edu.tw/9CC/declare/content.php?ID=346

Tipton, J. K. (1997). Interdisciplinary instruction in middle grade classrooms: Realistic reform or impossible dream? *Dissertation Abstracts International, 58*(12), 4546. (UMI No. AAT9819049)

Tsai, C. (2002). Chinese-ization and the nationalistic curriculum reform in Taiwan. *Journal of Education Policy, 17*(2), 229-243.

Tsuei, T. (1995). An analysis of the relationships between and among principals' and teachers' perceptions toward assumptions of teaching the learning and integrated curriculum. (Doctoral dissertation, University of Northern Colorado, 1995). *Dissertation Abstracts International, 56*(08), 2997.

Vars, G. F. (1993). *Interdisciplinary teaching: Why and how* (2nd ed.). Columbus. OH: National Middle School Association.

Vars, G. F. & Beane, J. (2000). Integrative Curriculum in a Standards-Based World. ERIC Accession No: ED441618, 1-7.

Wai, T. (Writer), Wang, C. (Writer), & Fu, C. (Writer/Director). (2007a). Challenge from overseas. [Television series episode]. In H. Lee (Producer), *The history of Taiwanese people*. Taipei: Public Television Service.

Wai, T. (Writer), Wang, C. (Writer), & Fu, C. (Writer/Director). (2007b). Formosa [Television series episode]. In H. Lee (Producer), *The history of Taiwanese people*. Taipei: Public Television Service.

Waller, C. R. (1997). An integrated discipline-based art education framework for Bramlett elementary school, Oxford, Mississippi. *Dissertation Abstracts International, 58*(11), 4162. (UMI No. AAT9816982)

Wang, C. (2000). Elementary school teachers' attitudes toward an interdisciplinary curriculum in Taiwan, Republic of China. (Doctoral dissertation, University of North Colorado, 2000). *Dissertation Abstracts International, 61*(06), 2192.

Wang. C. [王真麗] (2000). 國民小學教師對於合科課程的態度之研究 [Elementary school teachers' attitudes toward an interdisciplinary curriculum]. *屏東師院學報* [*Journal of Pingtung Teachers College*], *14*, 113-152.

Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry. *Review of Educational Research*, *68*(2), 130-178.

Wiggins, J. & Wiggins, R. (1997). Integrating through conceptual connections. *Music Educators Journal, 83*(4), 38-41

Whitaker, N. L. (1996). Elusive connections: Music integration and the elementary classroom. *Bulletin of the Council for Research in Music Education, 130,* 89-99.

Wood, W. (2000). Attitude change: Persuasion and social influence. *Annual Review of Psychology, 5*, 539-570.

Woods, B. S., & Demerath, P. (2001). A cross-domain explanation of metaphor teaching as persuasion. *Theory into Practice*, *40*(4), 228-234.

Yang, S. (2001). Dilemmas of education reform in Taiwan: Internationalization or localization? Paper presented at the 2001 Annual Meeting of the Comparative and International Education Society, Washington D.C., USA, March 13-17, 2001.

Zeichner, K.M. & Gore, J. (1990). Teacher socialization. In Houston, W.R. (Ed.) *Handbook of Research on Teacher Education* (pp. 329-348). New York: Macmillan.